

December 6, 2005

Mr. Jim Tischler North Coast Regional Water Quality Control Board 5550 Skylane Dr., Ste. A Santa Rosa, CA 95403

RE: 2<sup>nd</sup> AND 3<sup>rd</sup> QUARTER 2005 MONITORING WELL SAMPLING REPORT AND

RECOMMENDATION FOR FEASIBILITY STUDY/CORRECTIVE ACTION

**PLAN** 

FORMER GASOLINE UNDERGROUND STORAGE TANK

SONOMA COUNTY AGRICULTURE BUILDING

2604 VENTURA AVENUE, SANTA ROSA, CALIFORNIA

EBA Project No. 00-750-4 (31)

Dear Mr. Tischler:

Please find enclosed the Second and Third Quarter 2005 Quarterly Monitoring Well Sampling Report and Recommendation for Feasibility Study/Corrective Action Plan (FS/CAP) prepared by EBA Engineering (EBA) for the site located at 2604 Ventura Avenue in Santa Rosa, California (Figure 1). Groundwater monitoring is being conducted in accordance with a letter from the North Coast Regional Water Quality Control Board (NCRWQCB) dated January 31, 2005.

#### **QUARTERLY MONITORING AND SAMPLING**

On April 6 and July 12, 2005, EBA personnel collected groundwater samples and recorded groundwater level measurements from monitoring wells BE-4 and MW-3 through MW-8. The measurements were used to calculate groundwater flow direction and gradient. During these April and July sampling events, the groundwater flow directions were calculated to be approximately South 76° West and North 87° West, respectively, with gradients of 0.007 foot/foot. The corresponding groundwater elevation data are shown on the Potentiometric Surface Maps (Figures 2 and 3) and are summarized in Table 1.

Prior to sampling, the wells were purged of standing water to aid in collecting a representative sample of formation water. Field data sheets detailing groundwater pH, electrical conductivity, and temperature during the purging of monitoring wells BE-4 and MW-3 through MW-8 are attached. Each monitoring well was purged until the water quality parameters had stabilized and a minimum of three well volumes was removed. Purge water is stored on-site in properly labeled 55-gallon DOT 17H drums pending disposal.

During the second quarter, groundwater samples were collected from BE-4 and MW-3 through MW-8. During the third quarter, groundwater samples were collected from BE-4 and MW-6 through MW-8. All groundwater samples were obtained using a single sample disposable bailer fitted with a bottom-emptying device to minimize water degassing. Groundwater samples were transferred into properly labeled, laboratory-supplied sterile sample containers. The groundwater samples were logged on a Chain-of-Custody form and placed under refrigerated conditions. A courier from Alpha Analytical Laboratories, Inc., a California State-certified laboratory, picked up the refrigerated samples for chemical analytical testing. The Certified Analytical Reports and Chain-of-Custody Records are included with this report.

#### **GROUNDWATER ANALYSIS**

The groundwater samples were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (TPH-g) using Environmental Protection Agency (EPA) Method 8260GRO and TPH as diesel (TPH-d) using EPA Method 8015DRO. Benzene, toluene, ethylbenzene, total xylenes (BTEX), lead scavengers, and the five fuel oxygenates [Methyl tert-Butyl Ether (MtBE), Di-Isopropyl Ether (DIPE), Ethyl tert-Butyl Ether (EtBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA)] were analyzed using EPA Method 8260B.

#### ANALYTICAL RESULTS

Analytical results obtained during the second and third quarters indicate that samples collected from monitoring well MW-6 contained detectable levels of TPH-g, TPH-d, benzene, ethylbenzene, and total xylenes. Concentrations of toluene were reported in the groundwater sample collected from MW-6 in the third quarter, only. Also, MtBE was detected in samples collected from monitoring wells MW-6 and MW-7 at concentrations ranging from 2.5 to 4.8 micrograms per liter (µg/L).

All other analytes in groundwater samples collected during the second and/or third quarters from monitoring wells BE-4 and MW-3, MW-4, MW-5 and MW-8 were below the respective laboratory Practical Quantitation Limits (PQL's). Analytical results are summarized in Tables 2, 3, and 4. Copies of the Certified Analytical Reports are enclosed.

#### RECOMMENDATION

Results from previous investigative activities including quarterly monitoring of groundwater elevations and concentrations in monitoring wells BE-4 and MW-3 through MW-6 suggest that the majority of petroleum hydrocarbon concentrations in groundwater are located proximal to the former UST excavation in the vicinity of MW-6. Furthermore, additional information gathered during the February 2004 investigation from soil borings and subsequent monitoring and sampling of monitoring wells MW-7 and MW-8 indicate that concentrations of petroleum hydrocarbons in groundwater have been adequately defined in the lateral and vertical directions.

EBA, therefore, proposes that a FS/CAP be prepared in which several treatment methodologies will be analyzed for technical applicability for remediation of soil, groundwater, and the capillary fringe.



Methodologies selected based on technical application will also undergo a feasibility study in which anticipated costs, removal time, and possible site impacts will be discussed. Conclusions, recommendations, and a Corrective Action Work Plan will be included for the implementation of the selected treatment methodology(s).

EBA is looking forward to beginning this scope of work upon regulatory approval. If you have any comments or questions, please feel free to call at (707) 544-0784. Thank you for your time and consideration in reviewing this document.

Reviewed by

Matthew Earnshaw, P.G.

Project Geologist

Sincerely,

EBA ENGINEERING

Maxwell Wilmarth Staff Geologist

Supervised by

Duane Butler, P.E. C.E. #13357

Attach: Figure 1: Location Map

Figure 2: Potentiometric Surface Map – April 6, 2005

Figure 3: Potentiometric Surface Map – July 12, 2005

Table 1: Monitoring Well Survey and Water Level Data
Table 2: Groundwater Sample Analytical Results; TPH-g, TPH-d, & BTEX

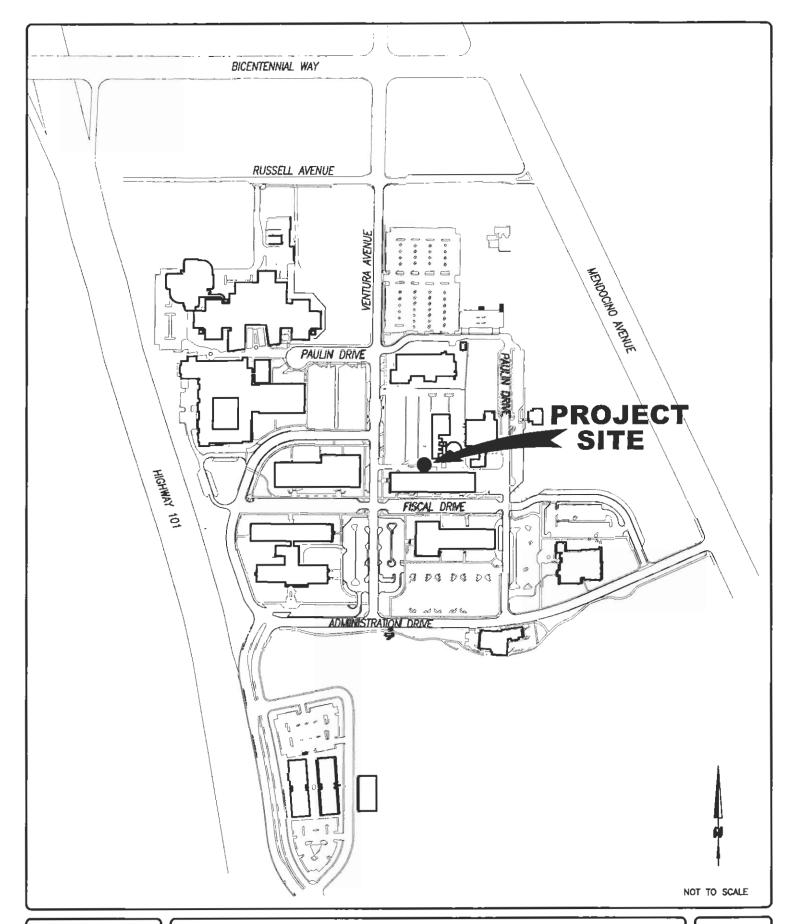
Table 3: Groundwater Sample Analytical Results; Fuel Oxygenates

Table 4: Groundwater Sample Analytical Results; Lead Scavengers & Dissolved/Total Lead

Field Data Sheets

Certified Analytical Reports and Chain-of-Custody Records

ce: Frank Donahue, Sonoma County Facilities Operations, 2680 Ventura Ave., Santa Rosa, CA 95403





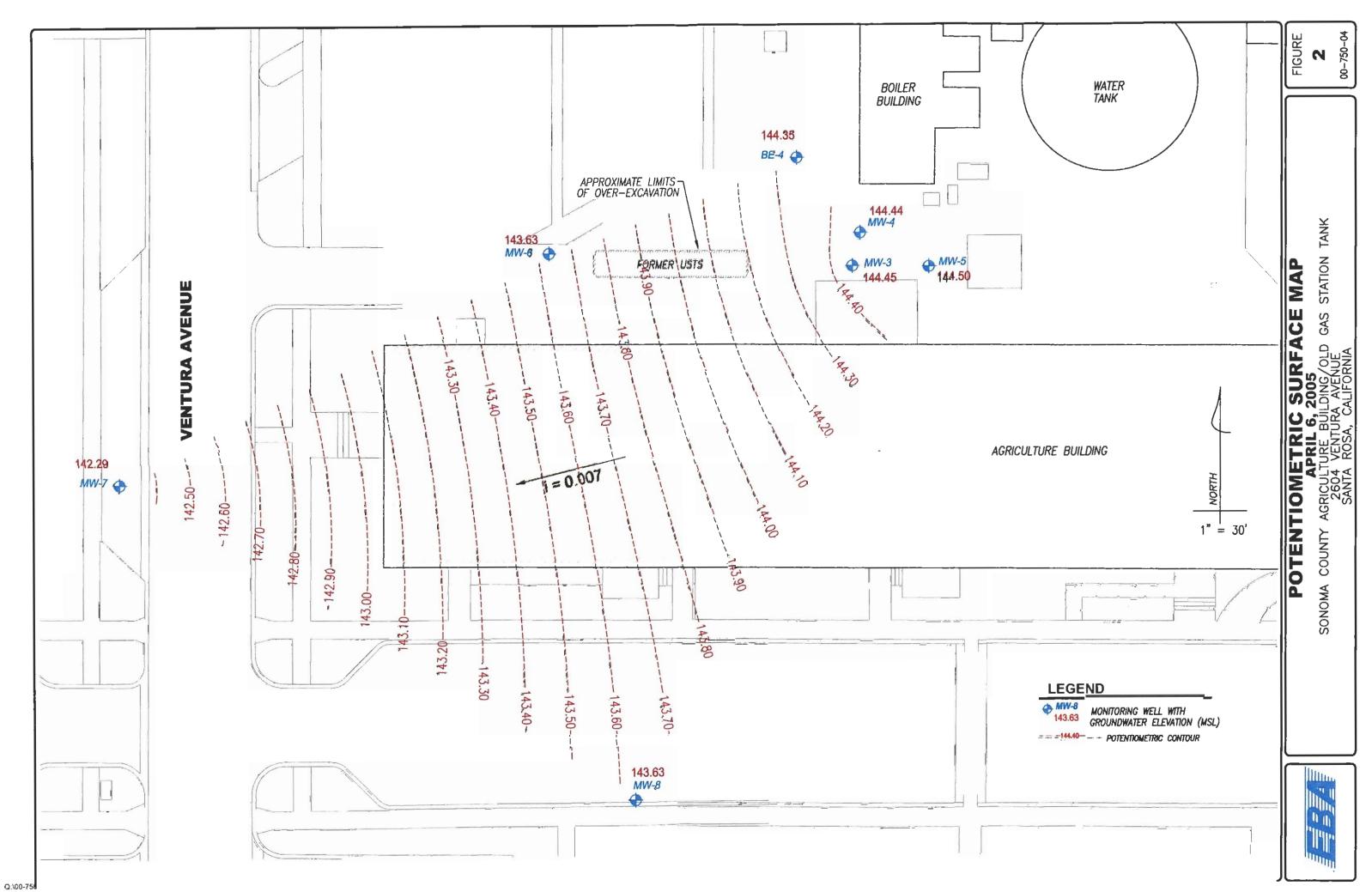
#### **LOCATION MAP**

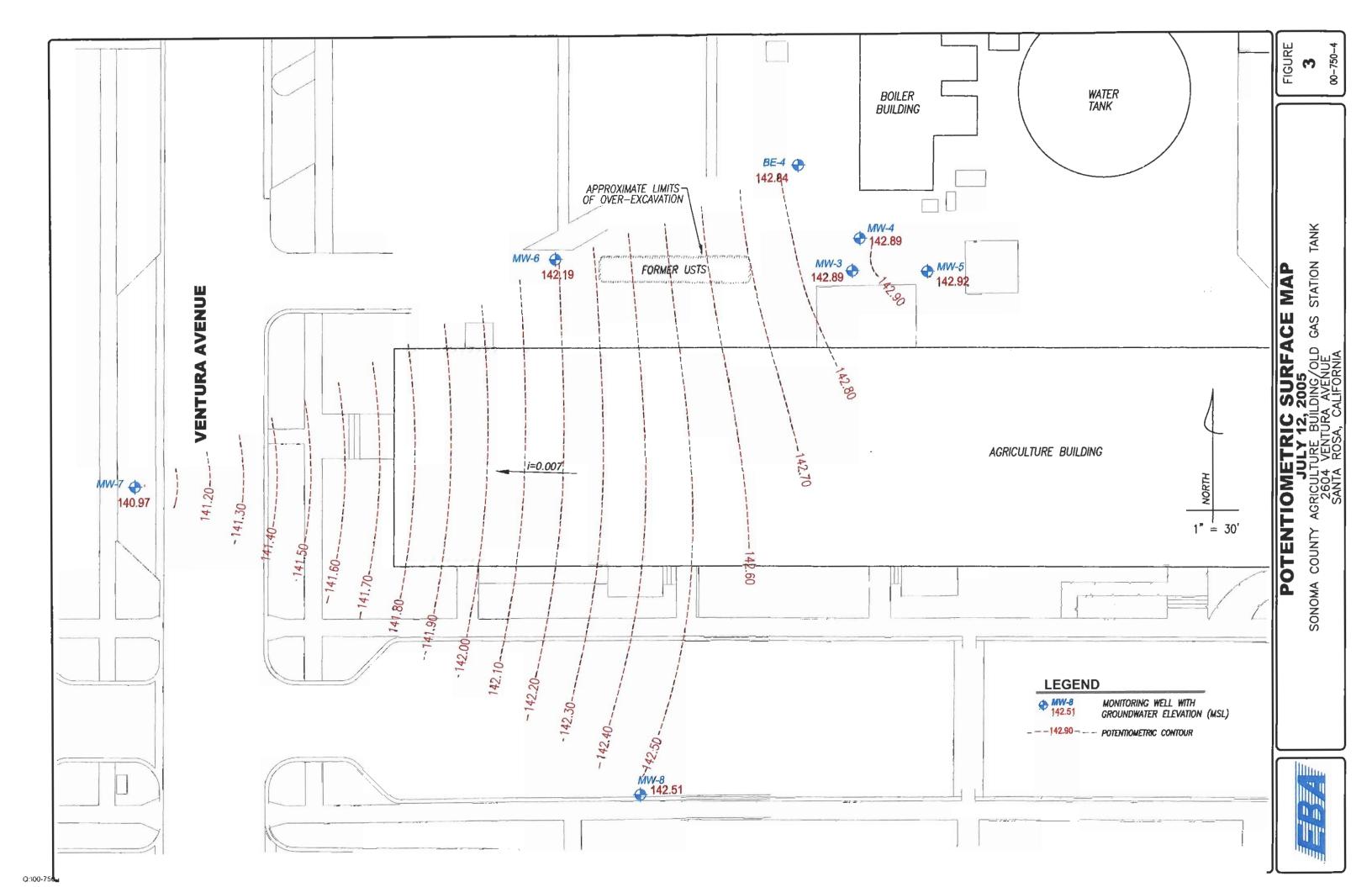
SONOMA COUNTY AGRICULTURE BUILDING/OLD GAS STATION TANK 2604 VENTURA AVENUE SANTA ROSA, CALIFORNIA

**FIGURE** 

1

00-750-04





# TABLE 1 MONITORING WELL SURVEY AND WATER LEVEL DATA SONOMA COUNTY AGRICULTURE BUILDING 2604 Ventura Ave., Santa Rosa, California

Monitoring Well ID	Well Depth (feet)	Screened Interval (feet)	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Groundwater Elevation (MSL)	Date
		1		3.40	144.36	3/16/1999
			!	5.07	142.69	7/12/2000
				5.34	142.42	10/4/2000
			İ	4.36	143.40	1/18/2001
				4.68	143.08	4/18/2001
				5.37	142.39	7/26/2001
		{		5.70	142.06	10/29/2001
		1		4.13	143.63	1/24/2002
			ļ	4.69	143.07	4/23/2002
				5.50	142.26	7/19/2002
				5.72	142.04	10/29/2002
BE-4	13.5	*	147.76	2.88	144.88	1/16/2003
				3.67	144.09	4/14/2003
			ì	5.84	141.92	10/22/2003
		Ì	ĺ	3.95	143.81	1/23/2004
				4.44	143.32	4/5/2004
		1		5.93	141.83	7/28/2004
				5.38	142.38	10/26/2004
				3.75	144.01	1/31/2005
	_			3,41	144.35	4/6/2005
				4.92	142.84	7/12/2005
				3.35	144.39	3/16/1999
			1	5.02	142.72	7/12/2000
				5.29	142.45	10/4/2000
				4.31	143.43	1/18/2001
				4.62	143.12	4/18/2001
				5.31	142.43	7/26/2001
			ł	5.60	141.44	10/29/2001
			147.74	4.05	143.69	1/24/2002
				4.62	143.12	4/23/2002
				5.45	141.59	7/19/2002
				5.56	142.18	10/29/2002
MW-3	8.0	*		2.85	144.89	1/16/2003
				3.67	144.07	4/14/2003
				5.51	142.23	10/22/2003
İ				4.95	142.79	1/23/2004
				4.93	143.35	4/5/2004
				5.94	143.33	7/28/2004
				I		
			147.81**	5.33	142.48	10/26/2004
			147.01	3.73	144.08	1/31/2005
				3.36	144.45	4/6/2005
				4.92	142.89	7/12/2005

#### TABLE 1 MONITORING WELL SURVEY AND WATER LEVEL DATA SONOMA COUNTY AGRICULTURE BUILDING

2604 Ventura Ave., Santa Rosa, California

Monitoring Well ID	Well Depth (feet)	Screened Interval (feet)	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Groundwater Elevation (MSL)	Date
				3.28	144.42	3/16/1999
			1	4.96	142.74	7/12/2000
				5.24	142.46	10/4/2000
		ļ	}	4.24	143.46	1/18/2001
				4.56	143.14	4/18/2001
				5.26	142.44	7/26/2001
				5.57	142.13	10/29/2001
			147.70	3.99	143.71	1/24/2002
			ĺ	4.55	143.15	4/23/2002
				5.40	142.30	7/19/2002
	2.0	*		5.54	142.16	10/29/2002
MW-4	8.0	T		2.78	144.92	1/16/2003
				3.59	144.11	4/14/2003
				5.75	141.95	10/22/2003
				3.91	143.79	1/23/2004
				4.33	143.37	4/5/2004
				5.93	141.81	7/28/2004
			147.74**	5.24	142.50	10/26/2004
				3.65	144.09	1/31/2005
				3.30	144.44	4/6/2005
	•			4.85	142.89	7/12/2005
				3.02	144.51	3/16/1999
				4.73	142.80	7/12/2000
				4.99	142.54	10/4/2000
				4.01	143.52	1/18/2001
				4.34	143.19	4/18/2001
				5.02	142,51	7/26/2001
				5.31	142.22	10/29/2001
			147.53	3.73	143.80	1/24/2002
				4.32	143.21	4/23/2002
				5.15	142.38	7/19/2002
				5.27	142.26	10/29/2002
MW-5	8.5	*		2.54	144.99	1/16/2003
				3.38	144.15	4/14/2003
				5.51	142.02	10/22/2003
				4.71	142.82	1/23/2004
				4.08	143.45	4/5/2004
				5.65	141.90	7/28/2004
		]		5.01	142.54	10/26/2004
			147.55**	3.42	144.13	1/31/2005
				3.05	144.50	4/6/2005
				4.63	142.92	7/12/2005
		1		7,0,7	1,12,72	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

## TABLE 1 MONITORING WELL SURVEY AND WATER LEVEL DATA SONOMA COUNTY AGRICULTURE BUILDING

2604 Ventura Ave., Santa Rosa, California

Monitoring Well ID	Well Depth (feet)	Screened Interval (feet)	TOC Elevation (feet)	Depth to Groundwater from TOC (feet)	Groundwater Elevation (MSL)	Date
				5.67	142,05	7/12/2000
		Í	ł	5.91	141.81	10/4/2000
				5.08	142.64	1/18/2001
				5.33	142.39	4/18/2001
			<u> </u>	5.97	141.75	7/26/2001
			1	6.08	141.64	10/29/2001
			147.72	4.82	142.90	1/24/2002
			147.72	5.33	142.39	4/23/2002
				6.00	141.72	7/19/2002
,				6.17	141.55	10/29/2002
MW-6	15	5'-15'	l i	3.47	144.25	1/16/2003
				4.38	143.34	4/14/2003
			}	6.36	141.36	10/22/2003
}				4.64	143.08	1/23/2004
				5.10	142.62	4/5/2004
				6.42	141.35	7/28/2004
			ł I	5.82	141.95	10/26/2004
ĺ			147.77**	4.45	143.32	1/31/2005
ì				4.14	143.63	4/6/2005
				5.58	142.19	7/12/2005
		<u> </u>		4.98	141.29	4/5/2004
ł				6.02	140.25	7/28/2004
				5,45	140.82	10/26/2004
MW-7	20	5'-20'	146.27	4.41	141,86	1/31/2005
				3.98	142.29	4/6/2005
				5.30	140.97	7/12/2005
				3.02	142.93	4/5/2004
				4.71	141.24	7/28/2004
				3.48	142.47	10/26/2004
MW-8	20	5'-20'	145.95	2,50	143.45	1/31/2005
1.2	20	5 20	1,5,75	2.32	143.63	4/6/2005
	ĺ			3.44	142.51	7/12/2005

TOC = Top of Casing.

<sup>\*</sup> Construction data not available to EBA.

<sup>\*\*</sup> All wells re-surveyed by EBA 4/19/04.

#### TABLE 2 GROUNDWATER SAMPLE ANALYTICAL RESULTS TPH-g, TPH-d, BTEX

#### Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	TPH-g (μg/L)	TPH-d (µg/L)	Benzene	Toluene		Total Xylenes
				(µg/L)	(µg/L)	(µg/L)	(µg/L)
	3/16/1999	<50	200	< 0.30	<0.30	<0.50	<0.50
i l	7/12/2000	160	110	< 0.30	< 0.30	< 0.50	<0.50
	10/4/2000	190	120	< 0.30	< 0.30	<0.50	<0.50
	1/18/2001	150	140	< 0.30	< 0.30	<0.50	<0.50
( )	4/18/2001	91	52	< 0.30	0.74	< 0.50	<0.50
i l	7/26/2001	250	110	< 0.30	< 0.30	<0.50	<0.50
	10/29/2001	250	150	< 0.30	< 0.30	< 0.50	<0.50
]	1/24/2002	<50	130	< 0.30	< 0.30	<0.50	<0.50
i i	4/23/2002	220	190	< 0.30	<0.30	<0.50	<0.50
	7/19/2002	220	210	< 0.30	< 0.30	<0.50	< 0.50
BE-4	10/29/2002	240	240	< 0.30	< 0.30	< 0.50	<0.50
}	1/16/2003	<50	82	< 0.30	< 0.30	<0.50	<0.50
	4/14/2003	94	130	< 0.30	< 0.30	<0.50	<0.50
	10/22/2003	190	74	< 0.30	0.37	<0.50	<0.50
	1/23/2004	58	68	< 0.30	< 0.30	<0.50	<0.50
	4/5/2004	87	54	< 0.30	< 0.30	<0.50	<0.50
	7/28/2004	110	150	< 0.30	< 0.30	<0.50	< 0.50
	10/26/2004	87	<50	< 0.30	< 0.30	<0.50	<0.50
	1/31/2005	<50	< 50	< 0.30	< 0.30	<0.50	<0.50
	4/6/2005	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/12/2005	<50	<50	<0.30	<0.30	<0.50	<0.50
	3/16/1999	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/12/2000	<50	<50	< 0.30	< 0.30	<0.50	<0.50
}	10/4/2000	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	1/18/2001	<50	<50	< 0.30	< 0.30	< 0.50	<0.50
	4/18/2001	<50	<50	< 0.30	0.76	<0.50	<0.50
	7/26/2001	<50	< 50	< 0.30	< 0.30	<0.50	<0.50
]	10/29/2001	<50	< 50	< 0.30	< 0.30	<0.50	<0.50
ĺ	1/24/2002	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	4/23/2002	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/19/2002	<50	<50	< 0.30	<0.30	<0.50	< 0.50
MW-3	10/29/2002	<50	<50	< 0.30	< 0.30	<0.50	<0.50
1	1/16/2003	<50	< 50	< 0.30	< 0.30	<0.50	<0.50
	4/14/2003	<50	<50	< 0.30	< 0.30	< 0.50	<0.50
	10/22/2003	NS	NS	NS	NS	NS	NS
	1/23/2004	<50	<52	<0.30	< 0.30	< 0.50	< 0.50
	4/5/2004	<50	<50	< 0.30	< 0.30	< 0.50	<0.50
	7/28/2004	NS	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS	NS
	4/6/2005	<50	<50	< 0.30	< 0.30	< 0.50	<0.50
	7/12/2005	NS	NS	NS	NS	NS	NS

## TABLE 2 GROUNDWATER SAMPLE ANALYTICAL RESULTS TPH-g, TPH-d, BTEX

Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	TPH-g (μg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (μg/L)
	3/16/1999	<50	<50	<0,30	<0.30	<0.50	<0.50
		<50 <50	<50 <50	< 0.30	<0.30	<0.50	<0.50
	7/12/2000	} .	<50 <50		<0.30	<0.50	<0.50
	10/4/2000	<50 <50	<50 <50	<0.30 <0.30	<0.30	<0.50	<0.50
	1/18/2001	<50 <50	<50 <50	< 0.30	1.2	<0.50	<0.50
	4/18/2001 7/26/2001	<50 <50	<50	< 0.30	<0.30	<0.50	<0.50
	10/29/2001	<50 <50	<50 <50	< 0.30	<0.30	<0.50	<0.50
	1/24/2001	<50 <50	<50	< 0.30	<0.30	<0.50	<0.50
	4/23/2002	<50	<50	< 0.30	<0.30	<0.50	<0.50
i l		<50 <50	<50 <50	< 0.30	<0.30	<0.50	<0.50
MW-4	7/19/2002	<50 <50	83	< 0.30	<0.30	<0.50	<0.50
14144-4	10/29/2002	<50	<50	< 0.30	<0.30	<0.50	<0.50
1	1/16/2003 4/14/2003	<50 <50	<50 <50	<0.30	<0.30	<0.50	<0.50
	10/22/2003	NS NS	NS	NS	NS	NS NS	NS NS
	1/23/2004	<50	<52	< 0.30	<0.30	<0.50	<0.50
	4/5/2004	<50 <50	<50	< 0.30	<0.30	<0.50	< 0.50
ļ .	7/28/2004	NS	NS	NS	NS	NS NS	NS
	10/26/2004	NS NS	NS	NS	NS NS	NS NS	NS I
	1/31/2005	NS NS	NS NS	NS	NS	NS	NS
	4/6/2005	<50	<50	< 0.30	<0.30	<0.50	<0.50
	7/12/2005	NS	NS	NS	NS	NS NS	NS NS
	3/16/1999	<50	<50	<0.30	< 0.30	< 0.50	< 0.50
	7/12/2000	<50	55	< 0.30	<0.30	<0.50	<0.50
	10/4/2000	<50	<50	< 0.30	< 0.30	<0.50	<0.50
[ [	1/18/2001	<50	<50	< 0.30	<0.30	<0.50	<0.50
	4/18/2001	<50	<50	< 0.30	0.83	<0.50	<0.50
	7/26/2001	<50	<82	<0.30	<0.30	<0.50	<0.50
}	10/29/2001	<50	<50	< 0.30	<0.30	<0.50	< 0.50
l	1/24/2002	<50	<50	< 0.30	<0.30	<0.50	< 0.50
	4/23/2002	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
]	7/19/2002	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
MW-5	10/28/2002	<50	56	< 0.30	<0.30	<0.50	< 0.50
	1/16/2003	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	4/14/2003	<50	<50	< 0.30	< 0.30	< 0.50	< 0.50
	10/22/2003	NS	NS	NS	NS	NS	NS
	1/23/2004	<50	<56	< 0.30	< 0.30	<0.50	< 0.50
	4/5/2004	<50	<50	< 0.30	<0.30	<0.50	< 0.50
	7/28/2004	NS	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS	NS
	4/6/2005	<50	<50	< 0.30	< 0.30	< 0.50	< 0.50
	7/12/2005	NS	NS	NS	NS	NS	NS

## TABLE 2 GROUNDWATER SAMPLE ANALYTICAL RESULTS TPH-g, TPH-d, BTEX

### Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	TPH-g (µg/L)	TPH-d (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
	7/12/2000	8400	950	28	< 0.30	170	820
	10/4/2000	7800	760	40	0.57	300	420
	1/18/2001	9700	3200	100	1.1	700	1800
	4/18/2001	18000	2100	98	<30	820	1800
1	7/26/2001	6600	690	28	<3.0	320	310
	10/29/2001	4100	730	19	<3.0	170	260
	1/24/2002	4800	930	24	1.1	370	0.85
	4/23/2002	7300	1200	22	1.2	370	640
	7/19/2002	2400	580	8.3	< 0.30	78	70
MW-6	10/29/2002	3300	460	8.4	< 0.30	170	250
117 11 -0	1/16/2003	7300	930	17	0.99	300	540
	4/14/2003	12000	2200	<15	<15	440	740
	10/22/2003	3100	190	5.0	<1.5	43	35
	1/23/2004	3100	1300	4.7	<3.0	150	200
	4/5/2004	2400	7700	9.0	< 0.30	380	< 0.50
	7/28/2004	1600	1100	1.8	<1.5	16	11
İ	10/26/2004	8100	460	7.5	<3.0	290	430
	1/31/2005	8100	970	4.8	<3.0	250	210
	4/6/2005	5000	840	3.4	<1.5	180	140
	7/12/2005	5700	740	3.3	0.63	150	150
Ī	4/5/2004	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/28/2004	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
MW-7	10/26/2004	< 50	<50	< 0.30	< 0.30	< 0.50	< 0.50
1.1	1/31/2005	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	4/6/2005	<50	<50	< 0.30	< 0.30	< 0.50	< 0.50
	7/12/2005	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	4/5/2004	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/28/2004	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
MW-8	10/26/2004	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
MW-8	1/31/2005	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	4/6/2005	<50	<50	< 0.30	< 0.30	<0.50	< 0.50
	7/12/2005	<50	<50	< 0.30	<0.30	<0.50	< 0.50

 $\mu g/L = Micrograms per Liter.$ 

TPH-g = Total Petroleum Hydrocarbons as gasoline.

TPH-d = Total Petroleum Hydrocarbons as diesel.

NS= Not Sampled.

## TABLE 3 GROUNDWATER SAMPLE ANALYTICAL RESULTS

#### Fuel Oxygenates

## Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	Methyl tert- butyl ether (µg/L)	Di-isopropyl ether (μg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-butyl alcohol (µg/L)
	3/16/1999	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	1/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	4/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
ŀ	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/19/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
BE-4	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
Ì	1/16/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/14/2003	< 0.50	< 0.50	<0.50	< 0.50	<10
	10/22/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/23/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
:	4/5/2004	< 0.50	< 0.50	<0.50	< 0.50	<10
	7/28/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/26/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/31/2005	< 0.50	< 0.50	< 0.50	< 0.50	<10
İ	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2005	< 0.50	<0.50	< 0.50	<0.50	<10
	3/16/1999	< 0.50	< 0.50	< 0.50	< 0.50	<10
}	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	1/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
1	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/19/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
MW-3	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/16/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/14/2003	< 0.50	< 0.50	<0.50	< 0.50	<10
	10/22/2003	NS	NS	NS	NS	NS
	1/23/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/5/2004	< 0.50	< 0.50	<0.50	< 0.50	<10
	7/28/2004	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS
	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2005	NS	NS	NS	NS	NS

## TABLE 3 GROUNDWATER SAMPLE ANALYTICAL RESULTS

#### Fuel Oxygenates

## Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	Methyl tert- butyl ether (µg/L)	Di-isopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-butyl alcohol (µg/L)
	3/16/1999	<0.50	< 0.50	<0.50	< 0.50	<10
	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
	1/18/2001	< 0.50	< 0.50	<0.50	< 0.50	<10
	4/18/200 l	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/19/2002	<0.50	< 0.50	< 0.50	< 0.50	<10
MW-4	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/16/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/14/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/22/2003	NS	NS	NS	NS	NS
	1/23/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
l	4/5/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/28/2004	NS	NS	NS	NS	NS
[ [	10/26/2004	NS	NS	NS	NS	NS
ì	1/31/2005	NS	NS	NS	NS	NS
	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2005	NS	NS	NS	NS_	NS
	3/16/1999	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	<5.0
Į.	1/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
ĺ	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
[	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/19/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
MW-5	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	<10
	1/16/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/14/2003	< 0.50	< 0.50	< 0.50	< 0.50	<10
	10/22/2003	NS	NS	NS	NS	NS
	1/23/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	4/5/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/28/2004	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS
	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/12/2005	NS	NS	NS	NS	NS

### TABLE 3 GROUNDWATER SAMPLE ANALYTICAL RESULTS

#### Fuel Oxygenates

#### Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	Methyl tert- butyl ether (µg/L)	Di-isopropyl ether (µg/L)	Ethyl tert-butyl ether (µg/L)	Tert-amyl methyl ether (µg/L)	Tert-butyl alcohol (μg/L)
{	7/12/2000	40	< 0.50	< 0.50	< 0.50	<10
1	10/4/2000	33	< 0.50	< 0.50	< 0.50	110
ļ	1/18/2001	99	< 0.50	< 0.50	< 0.50	<10
	4/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<1000
	7/26/2001	43	<5.0	<5.0	< 5.0	<100
	10/29/2001	35	<5.0	<5.0	< 5.0	<100
	1/24/2002	27	< 0.50	< 0.50	< 0.50	<10
	4/23/2002	18	< 0.50	< 0.50	< 0.50	<10
	7/19/2002	27	< 0.50	< 0.50	< 0.50	10
MW-6	10/29/2002	16	< 0.50	< 0.50	< 0.50	<10
11111-0	1/16/2003	15	< 0.50	< 0.50	< 0.50	<10
	4/14/2003	<25	<25	<25	<25	<500
	10/22/2003	11	<2.5	<2.5	<2.5	<50
	1/23/2004	19	<5.0	<5.0	< 5.0	<50
	4/5/2004	< 0.50	< 0.50	< 0.50	< 0.50	<10
	7/28/2004	10	<2.5	<2.5	<2.5	<50
	10/26/2004	7.6	<5.0	<5.0	< 5.0	<100
	1/31/2005	<5.0	< 5.0	<5.0	<5.0	<100
i	4/6/2005	3.8	<2.5	<2.5	<2.5	<50
<u> </u>	7/12/2005	2.5	< 0.50	<0.50	< 0.50	<10
	4/5/2004	5.6	< 0.50	< 0.50	< 0.50	<10
	7/28/2004	24	< 0.50	<0.50	< 0.50	<10
MW-7	10/26/2004	25	< 0.50	< 0.50	< 0.50	<10
1,1,1,1	1/31/2005	13	< 0.50	< 0.50	< 0.50	<10
	4/6/2005	4.3	< 0.50	< 0.50	< 0.50	<10
	7/12/2005	4.8	< 0.50	<0.50	< 0.50	<10
	4/5/2004	< 0.50	< 0.50	<0.50	<0.50	<10
[	7/28/2004	< 0.50	< 0.50	<0.50	< 0.50	<10
MW-8	10/26/2004	< 0.50	< 0.50	<0.50	< 0.50	<10
1,4,4,-0	1/31/2005	< 0.50	< 0.50	<0.50	< 0.50	<10
	4/6/2005	< 0.50	< 0.50	<0.50	< 0.50	<10
	7/12/2005	<0.50	< 0.50	<0.50	< 0.50	<10

 $\mu$ g/L = Micrograms per Liter.

# TABLE 4 GROUNDWATER SAMPLE ANALYTICAL RESULTS Dissolved Lead, Lead Scavengers & Dissolved/Total Lead Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	1,2-Dichloro ethane (µg/L)	Chloro- benzene (µg/L)	1,3-Dichloro benzene (µg/L)	1,4-Dichloro benzene (µg/L)	1,2-Dichloro benzene (µg/L)	1,2- Dibromo- ethane (µg/L)	Dissolved Lead (mg/L)	Total Lead (mg/L)
	3/16/1999	NA	NA	NA	NA	NA	NA	NA	NA
	7/12/2000	< 0.50	< 0.50	1.2	3.6	2.6	< 0.50	NA	< 0.010
	10/4/2000	< 0.50	< 0.50	1.3	3.2	3.2	< 0.50	NA	NA .
	1/18/2001	< 0.50	< 0.50	0.87	1.9	2.9	< 0.50	< 0.050	NA
	4/18/2001	< 0.50	< 0.50	< 0.50	0.99	1.9	< 0.50	NA	< 0.050
	7/26/2001	< 0.50	0.6	0.78	2.4	5.0	< 0.50	< 0.050	NA
	10/29/2001	< 0.50	0.83	1.4	2.9	6.5	< 0.50	< 0.050	NA
	1/24/2002	< 0.50	< 0.50	< 0.50	0.54	1.5	< 0.50	< 0.050	NA
	4/23/2002	< 0.50	0.88	1.0	2.8	7.8	< 0.50	< 0.050	NA
	7/19/2002	< 0.50	0.85	1.6	2.6	7.3	< 0.50	< 0.050	NA
BE-4	10/29/2002	< 0.50	0.89	1.4	2.4	8.2	< 0.50	< 0.050	NA
	1/16/2003	<0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.010	NA
·	4/14/2003	<0.50	< 0.50	0.73	0.82	3.7	< 0.50	< 0.010	NA
	10/22/2003	< 0.50	< 0.50	0.86	0.96	5.8	< 0.50	NA	<0.010
	1/23/2004	< 0.50	< 0.50	0.65	< 0.50	3.0	< 0.50	NA	0.031
	4/5/2004	< 0.50	< 0.50	0.96	0.61	5.0	< 0.50	< 0.010	NA
	7/28/2004	< 0.50	< 0.50	0.91	0.73	7.0	< 0.50	NA	NA
	10/26/2004	< 0.50	< 0.50	< 0.50	< 0.50	2.9	< 0.50	NA	NA
	1/31/2005	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	NA	NA
	4/6/2005	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	7/12/2005	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	3/16/1999	NA	NA	NA	NA	NA	NA	NA	NA
	7/12/2000	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	0.036
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NΛ
	1/18/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	<0,50	< 0.50	NA	< 0.050
	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	7/19/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
MW-3	10/29/2002	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/16/2003	<0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	<0.010	NA
	4/14/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.010	NA
	10/22/2003	NS	NS	NS	NS	NS	NS	NS	NS
	1/23/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	0.069
	4/5/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	7/28/2004	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/2004	l ns	NS	NS	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS	NS	NS	NS
	4/6/2005	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	7/12/2005	NS	NS	NS	NS	NS	NS	NS	NS

# TABLE 4 GROUNDWATER SAMPLE ANALYTICAL RESULTS Dissolved Lead, Lead Scavengers & Dissolved/Total Lead Sonoma County Agriculture Building 2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	1,2-Dichloro ethane (µg/L)	Chloro- benzene (µg/L)	1,3-Dichloro benzene (µg/L)	1,4-Dichloro- benzene (µg/L)	1,2-Dichloro benzene (µg/L)	1,2- Dibromo- ethane (µg/L)	Dissolved Lead (mg/L)	Total Lead (mg/L)
	3/16/1999	NA	NA	NA	NA	NA	NA	NA	NA
	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	0.069
	10/4/2000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	1/18/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/18/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.050
	7/26/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	7/19/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
MW-4	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/16/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	4/14/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	10/22/2003	NS	NS	NS	NS	NS	NS	NS	NS
	1/23/2004	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	0.051
	4/5/2004	<0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.010	NA
	7/28/2004	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS	NS	NS	NS
	4/6/2005	<0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	NA	NA
	7/12/2005	NS	NS	NS	NS	NS	NS	NS	NS
	3/16/1999	NA	NA	NA	NA :	NA	NA	NA	NA
	7/12/2000	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.010
	10/4/2000	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	1/18/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/18/2001	<0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	NA	< 0.050
	7/26/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	10/29/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/24/2002	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NΑ
	4/23/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	7/19/2002	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
MW-5	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/16/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	4/14/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	10/22/2003	NS	NS	NS	NS	NS	NS	NS	NS
	1/23/2004	<0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	NA	0.012
ļ	4/5/2004	<0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	<0.010	NA
	7/28/2004	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/2004	NS	NS	NS	NS	NS	NS	NS	NS
	1/31/2005	NS	NS	NS	NS	NS	NS	NS	NS
	4/6/2005	<0.50	< 0.50	<0.50	< 0.50	<0.50	< 0.50	NA	NA
	7/12/2005	NS	NS	NS	NS	NS	NS	NS	NS

#### TABLE 4

#### GROUNDWATER SAMPLE ANALYTICAL RESULTS

#### Dissolved Lead, Lead Scavengers & Dissolved/Total Lead Sonoma County Agriculture Building

2604 Ventura Ave., Santa Rosa, California

SAMPLE ID	DATE	1,2-Dichloro ethane (µg/L)	Chloro- benzene (µg/L)	1,3-Dichloro benzene (µg/L)	1,4-Dichloro benzene (μg/L)	1,2-Dichloro benzene (µg/L)	1,2- Dibromo- ethane (µg/L)	Dissolved Lead (mg/L)	Total Lead (mg/L)
	7/12/2000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.010
	10/4/2000	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	1/18/2001	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/18/2001	<0,50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 0.050
	7/26/2001	< 0.50	< 0.5()	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	10/29/2001	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	1/24/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	4/23/2002	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
	7/19/2002	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
MW-6	10/29/2002	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.050	NA
[V] VY *U	1/16/2003	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	4/14/2003	<25	<25	<25	<25	<25	<25	< 0.010	NA
	10/22/2003	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NA	<0.010
	1/23/2004	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	<0,50	NA	0.051
	4/5/2004	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	7/28/2004	<2.5	< 2.5	<2.5	<2.5	<2.5	<2.5	NA	NA
	10/26/2004	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	NA	NA
	1/31/2005	<5.0	< 5.0	<5.0	<5.0	<5.0	<5.0	NA	NA
	4/6/2005	<2.5	<2.5	<2.5	<2.5	<2.5	< 2.5	NA	NA
	7/12/2005	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	4/5/2004	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.010	NA
	7/28/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
MW-7	10/26/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
171 77-7	1/31/2005	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	7/12/2005	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	4/5/2004	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.010	NA
	7/28/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
MW-8	10/26/2004	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
141 44 -0	1/31/2005	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA
	4/6/2005	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	NA	NA
	7/12/2005	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	NA

 $\mu$ g/L = Micrograms per Liter.

mg/L = Milligrams per Liter.

NS = Not Sampled.

NA = Not Analyzed.

Project No. 00-750-4 W				Well No: BE-4			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fi	Well Depth from TOC: 13.5'		
Global I.D. # T0609700769				Well Diamete	rr: 2"		
Date: 4/6/2005				Product Leve	I from TOC: None		
Time: 1356				Water Level f	from TOC: 3.41'		
Recorded by: M. Wil	marth			Screened Inte	rval:		
Purge Time (duration)	: 7 mins.			Well Elevatio	n (TOC): 147.76' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip. in last	5 days: 0.48" (STA)		
	_	VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 13.5¹ - <u>3.41</u>	<u>'</u> ) x (_0.083:	$(33)^2 \times 3.14 \times 7.48$	= <u>1.64</u> g	allons in one v	vell volume		
{ Well Depth - Water		radius (ft) }					
<u>4.93</u> ga	llons in 3 we	ll volumes		_5_ gal	ions removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Time	рН	EC (μS/cm)	Temp °C	Gallons Removed	Арреагалсе		
1356	7.31	472	20.6	0.5	Clear		
1401	6.90	448	20.5	3	Cloudy-silty		
1403	6.90	448	20.5	5	Cloudy-silty		
Water Level After Pur	ging: <u>6.00</u>	ft. (TOC)		80% of Origin	nal Water Level: <u>5.47</u> ft. (TOC)		
Water Level Before Sa							
APPEARANCE OF SAMPLE: Cloudy					Time: 1405		
Bailer: Aqua Bailer Sir	ngle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Туре:		GPM:			
Dedicated:		Type:		GPM:			
DECONTAMINATIO	N METHOD: TS	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	: TPH-g, TPH-d.	, BTEX, Fuel Oxygena	ntes, Lead Seavengers				
LABORATORY: Alj	oha Analytical		·				

Project No. 00-750-4				Well No: MW-3			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	Well Depth from TOC: 8.0'		
Global I.D. # T060970	00769			Well Diamete	r: 4"		
Date: 4/6/2005				Product Leve	1 from TOC: None		
Time: 1229				Water Level (	from TOC: 3.36 <sup>t</sup>		
Recorded by: M. Wil	marth			Screened Inte	rval:		
Purge Time (duration)	: 14 mins		-	Well Elevatio	on (TOC): 147.81' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip. in last	5 days: 0.48" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 8.0' - 3.36'	) x ( 0.1666	$)^2 \times 3.14 \times 7.48 =$	4.65 gall	lons in one wel	Il volume		
{ Well Depth - Water		radius (fl) )					
	allous in 3 w	ell volumes		_14g;	allons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Time	рН	EC (μS/cm)	Temp °C	Gallons Removed	Appearance		
1229	7.13	412	19.8	0.5	Clear		
1233	6.93	378	19.6	3	Clear		
1235	6.90	412	19.5	6	Clear		
1239	6.91	409	19.5	9	Clear		
1243	6.89	412	19.6	12	Clear		
Water Level After Pur	ging: 4.05	fl. (TOC)		80% of Origin	nal Water Level: 4.29 ft. (TOC)		
				10070 Or Origin	The second secon		
Water Level Before Sampling: 4.05 ft. (TOC)  APPEARANCE OF SAMPLE: Cloudy				_	Time: 1245		
Bailer: Aqua Bailer Si	ngle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Type:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: T	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	: TPH-g, TPH-d	, BTEX, Fuel Oxygena	ates, Lead Scavengers				
LABORATORY: Al	pha Analytical						

Project No. 00-750-4				Well No: MW-4			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fi	rom TOC: 8.0'		
Global I.D. # T060970	00769			Well Diamete	т: 4"		
Date: 4/6/2005				Product Level	I from TOC: None		
Time: 1153	<u>-</u> -			Water Level f	from TOC: 3.30'		
Recorded by: M. Wil	marth			Screened Inte	rval:		
Purge Time (duration)	: 9 mins.			Well Elevatio	n (TOC): 147.74' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip. in last	5 days: 0.48" (STA)		
		VOLUME OF	WATER TO BE R	EMOVED BE	FORE SAMPLING		
( 8.0' - 3.30'	) x ( 0.1666	$)^2$ x 3.14 x 7.48 =	<u>3,06</u> gall	lons in one wel	l volune		
{ Well Depth - Water		radius (ft) }					
<u>9.19</u> gal	lons in 3 we	ll volumes			allons removed		
_			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Time	рН	EC (μS/em)	Temp °C	Gallons Removed	Appearance		
1153	7.73	302	18.8	1.5	Clear		
1155	7.21	296	18.8	3	Clear		
1158	7.11	297	18.8	6	Clear		
1202	7.11	297	18.8	10	Clear		
Water Level After Purp	ging: <u>4.20</u>	fl. (TOC)		80% of Origin	ial Water Level: 4.24 ft. (TOC)		
Water Level Before Sa	mpling: 4.2	<u>()</u> fl. (TOC)					
APPEARANCE OF SAMPLE: Clear					Time: 1210		
Bailer: Aqua Bailer Sin	gle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Туре:	"	GPM:			
Dedicated:		Туре:		GРМ:			
DECONTAMINATIO	N METHOD: TS	SP wash and disposable	e bailers				
SAMPLE ANALYSIS	трн-д, трн-д,	BTEX, Fuel Oxygena	ites, Lead Scavengers				
LABORATORY: Alpha Analytical							

Project No. 00-750-4				Well No: MW-5			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	om TOC: 8.5'		
Global I.D. # T060970	00769			Well Diamete	r: 4"		
Date: 4/6/2005			-	Product Level	from TOC: None		
Time: 1306				Water Level f	rom TOC: 3.05'		
Recorded by: M. Wil	marth			Screened Inte	rval:		
Purge Time (duration)	: 23 mins.			Well Elevation	n (TOC): 147.55' above MSL		
			WEAT	HER			
Wind: 0-5 mph	-			Precip. in last	5 days: 0.48" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 8.5' - 3.05'	) x ( 0.1666	$(x^2 + 3.14 \times 7.48)^2$		lons in one wel	l volume		
{ Well Depth - Water	<del></del>						
	allons in 3 w	ell volumes		يو للله	allons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Tìme	рН	EC (µS/cm)	Temp °C	Gallons Removed	Appearance		
1306	7.16	403	19.8	l	Clear		
1318	6.75	408	20.0	3	Cloudy		
1322	6.76	406	19.2	6	Cloudy		
1326	6.77	408	19.1	9	Cloudy		
1329	6.78	407	19.1	12	Cloudy		
	× -						
Water Level After Pur	ging: 4.00	ft. (TOC)		80% of Origin	nal Water Level: 4.14 ft. (TOC)		
Water Level Before Sa							
APPEARANCE OF SAMPLE: Cloudy					Time: 1335		
Bailer: Aqua Bailer Si	ngle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Туре:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: TS	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	: TPH-g, TPH-d	, BTEX, Fuel Oxygena	ntes, Lead Scavengers				
LABORATORY: AI	pha Analytical						

Project No. 00-750-4				Well No: MW-6			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	Well Depth from TOC: 15.0'		
Global 1.D. # T0609700769				Well Diamete	т: 2"		
Date: 4/6/2005				Product Leve	from TOC: None		
Time: 1115				Water Level f	from TOC: 4.14'		
Recorded by: M. Wi	lmarth			Screened Inte	rval: 5.0' -15.0'		
Purge Time (duration	): 7 mins.			Well Elevatio	n (TOC): 147.77' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip. in last	5 days: 0.48" (STA)		
		VOLUME OF	WATER TO BE R	EMOVED BE	FORE SAMPLING		
( 15.0' - <u>4.1</u> 4	1' ) x ( 0.083	33_) <sup>2</sup> x 3.14 x 7.48	= 1.77 g	gallons in one w	veli volume		
{ Well Depth - Water							
5.31 ga	illons in 3 we	ll volumes		<u>.6</u> gal	lons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Time	рН	EC (µS/em)	Temp °C	Gallons Removed	Appearance		
1115	6.84	496	19.0	0.5	Clear-sandy grey		
1118	6.67	496	18.8	3	Clear-sandy grey, HC odor		
1122	6.69	502	19.0	6	Clear-sandy grey, HC odor		
				<u>-</u>			
				_			
Water Level After Pur	ging: 8.10	ft. (TOC)		80% of Original Water Level: 6.31 ft. (TOC)			
Water Level Before Sa							
APPEARANCE OF SAMPLE: Clear					Time: 1130		
Bailer: Aqua Bailer Si	ngle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Туре:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: TS	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	S: TPH-g, TPH-d	, BTEX, Fuel Oxygena	ntes, Lead Scavengers				
LABORATORY: Al	pha Analytical						

Project No. 00-750-4				Well No: MW-7		
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fi	rom TOC: 20.0'	
Global I.D. # T060970	00769			Well Diamete	rr. 2"	
Date: 4/6/2005				Product Leve	1 from TOC: None	
Time: 1546			-	Water Level i	from TOC: 3.981	
Recorded by: M. Wil	nıarth			Screened Inte	rval: 5.0' -20.0'	
Purge Time (duration)	: 10 mins.			Well Elevatio	n (TOC): 146.27' above MSL	
	·		WEAT	THER		
Wind: 0-5 inph				Precip. in last	5 days: 0.48" (STA)	
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING	
( 20.0' - 3.98	') x ( 0.083	33 ) <sup>2</sup> x 3.14 x 7.48	= <u>2.61</u> g	allons in one v	veli volume	
{ Well Depth - Water	Level } { Well	radius (ft) }				
<u>7.83</u> ga	llons in 3 we	ll volumes		_8_ gal	ilons removed	
			CALIBR	ATION		
Parameter	Time	Calibration Before Sampling		Time	After Sampling	
pH:						
EC:						
FIELD MEASUREMENTS						
Time	рН	EC (µS/em)	Temp °C	Gallons Removed	Appearance	
1546	7.34	526	17.8	1	Clear	
1548	7.07	532	17.6	3	Clear	
1552	7.00	501	18.1	6	Clear	
1556	7.00	501	18.1	8	Clear	
Water Level After Pur	ging: 4.65	ft. (TOC)		80% of Origin	nal Water Level: 7.18 ft. (TOC)	
Water Level Before Sa			·			
APPEARANCE OF SAMPLE: Clear					Time: 1600	
Bailer: Aqua Bailer Sit	ngle Sample	Type: Disposable Pol	yethylene	GPM:		
Submersible:		Туре:		GPM:		
Dedicated:		Туре:	<u> </u>	GPM:		
DECONTAMINATIO	N METHOD: T	SP wash and disposable	e bailers			
SAMPLE ANALYSIS	: ТРН-д, ТРН-д	, BTEX, Fuel Oxygena	ites, Lead Scavengers			
LABORATORY: Alpha Analytical						

Project No. 00-750-4				Well No: N	Well No: MW-8		
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth f	rom TOC: 20.0'		
Global I.D. # T0609700769				Well Diamete	er: 2"		
Date: 4/6/2005				Product Leve	el from TOC: None		
Time: 1447				Water Level	from TOC: 2.32'		
Recorded by: M. Wil	marth			Screened Into	erval: 5.0' -20.0'		
Purge Time (duration)	: 22 mins.			Well Elevation	on (TOC): 145,95' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip. in las	t 5 days: 0.48" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 20.0' - 2.32	) x ( 0.083:	33 ) <sup>2</sup> x 3.14 x 7.48	= <u>2.88</u> g	gallons in one v	gallons in one well volume		
{ Well Depth - Water	Level } { Well	radius (ft) }	<u></u>				
<u>8.65</u> ga	llons in 3 we	ll volumes		<u>9</u> ga	llons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:		•					
EC:							
FIELD MEASUREMENTS							
Time	Hq	EC (µS/em)	Temp °C	Gallons Removed	Арреагансе		
1447	7.02	442	19.0	0.5	Clear		
1451	6.66	438	18.1	3	Cloudy		
1456	6.58	436	18.0	6	Cloudy		
1459	6.58	436	18,0	9	Cloudy		
	<del>-</del> .						
Water Level After Purp	ging: <u>9,90</u>	fl. (TOC)		80% of Origin	nal Water Level: <u>5.86</u> ft. (TOC)		
Water Level Before Sa	-		<u>.</u>	·			
APPEARANCE OF SAMPLE: Cloudy					Time: 1510		
Bailer: Aqua Bailer Sir	igle Sample	Type: Disposable Pol	yethylene	GPM:	GPM:		
Submersible:		Туре:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: T	SP wash and disposable	e bailers	-			
SAMPLE ANALYSIS	: TPH-g, TPH-d.	, BTEX, Fuel Oxygena	ites, Lead Scavengers				
LABORATORY: Alp	oha Analytical						

Well Diameter: 2"	Project No. 00-750-4 W				Well No: BE-4		
Product Level from TOC: None	Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth from TOC: 13.5'		
Water Level from TOC: 4.92'	Global I.D. # T0609700769				er: 2"		
Seconded by: M. Wilmarth   Screened Interval:	Date: 7/12/2005			Product Leve	from TOC: None		
Purge Time (duration): 8 mins.         Well Elevation (TOC): 147.76 above MSL           WEATHER           Wind: 0-5 inph         Precip. in last 5 days: 0.00" (STA)           VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING           13.5" - 4.92" ) x ( 0.08333 )² x 3.14 x 7.48 ≈1.40 gallons in one well volume           (Well Depth - Water Level ) { Well radius (ft) }           4.20 gallons in3well volumes           CALIBRATION           Parameter         Time         Calibration         Before Sampling         Time         After Sampling           FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	Time: 1109			Water Level i	from TOC: 4.92'		
Wind: 0-5 inph   Precip. in last 5 days: 0.00" (STA)	Recorded by: M. Wilmarth			Screened Inte	rval:		
Volume of Water to be removed before Sampling	Purge Time (duration): 8 mins.			Well Elevatio	n (TOC): 147.76' above MSL		
VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING     13.5' -     4.92'			WEAT	HER			
13.5' - 4.92'   x ( 0.08333 )   x 3.14 x 7.48 = 1.40   gallons in one well volume	Wind: 0-5 mph			Precip, in last	5 days: 0.00" (STA)		
(Well Depth - Water Level )         { Well radius (ft) }           4.20 gallons in 3 well volumes         4.5 gallons removed           CALIBRATION           Parameter         Time         Calibration         Before Sampling         Time         After Sampling           FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
4.20. gallons in 3 well volumes         4.5 gallons removed           CALIBRATION           Parameter         Time         Calibration         Before Sampling         Time         After Sampling           FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	( 13.5' - <u>4.92'</u> ) x ( 0.0833	33 ) <sup>2</sup> x 3.14 x 7.48	<u> 1.40 g</u>	allons in one v	vell volume		
CALIBRATION           Parameter         Time         Calibration         Before Sampling         Time         After Sampling           pH:         EC:         FIELD MEASUREMENTS           FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	{ Well Depth - Water Level } { Well	radius (ft) }					
Parameter         Time         Calibration         Before Sampling         Time         After Sampling           pH:	4.20 gallons in 3 well volumes			4.5 g	gallons removed		
pH:         EC:         FIELD MEASUREMENTS           FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	CALIBR						
FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	Parameter Time	Calibration	Before Sampling	Time	After Sampling		
FIELD MEASUREMENTS           Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	рН:						
Time         pH         EC (μS/cm)         Temp °C         Gallons Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty	EC:		u.				
Time         pH         EC (µS/cm)         Temp*C         Removed         Appearance           1109         7.05         328         24.8         0.5         Clear           1113         7.00         343         24.0         3         Brown silty			UREMENTS				
1113 7.00 343 24.0 3 Brown silty	Time pH	EC (µS/cm)	Temp °C	1	Appearance		
	1109 7.05	328	24.8	0.5	Clear		
1117 7.03 327 23.5 4.5 Brown silty	1113 7.00	343	24.0	3	Brown silty		
	7,03	327	23.5	4.5	Brown silty		
Water Level After Purging: 7.60 ft. (TOC) 80% of Original Water Level: 6.64 ft. (TOC)	Water Level After Purging: 7.60	ft (TOC)		80% of Origin	nal Water Level: 6.64 ft (TOC)		
				ova or origin	3. (33)		
	APPEARANCE OF SAMPLE: Slightly cloudy				Time: 1125		
Bailer: Aqua Bailer Single Sample Type: Disposable Polyethylene GPM:	Bailer: Aqua Bailer Single Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible: Type: GPM:	Submersible:	Type:		GPM:	·		
Dedicated: Type: GPM:	Declicated:	Type:		GPM:			
DECONTAMINATION METHOD: TSP wash and disposable bailers	DECONTAMINATION METHOD: TS	SP wash and disposable	e bailers				
AMPLE ANALYSIS: TPH-g, TPH-d, BTEX, 5 Fuel Oxygenates, Lead Scavengers	SAMPLE ANALYSIS: TPH-g, TPH-d,	BTEX, 5 Fuel Oxyge	nates, Lead Scavenger	rs			
ABORATORY: Alpha Analytical	LABORATORY: Alpha Analytical						

Project No. 00-750-4				Well No: MW-3			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	Well Depth from TOC: 8.0'		
Global I.D. # T0609700769				Well Diamete	r: 4"		
Date: 7/12/2005				Product Level	from TOC: None		
Time:		_	·	Water Level f	rom TOC: 4.92'		
Recorded by: M. Wil	lmarth			Screened Inter	rval:		
Purge Time (duration)	:			Well Elevation	n (TOC): 147.81 above MSL		
			WEAT	HER			
Wind: 0-5 mph				Precip, in last	5 days: 0.00" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BEI	FORE SAMPLING		
( 8.0'	) x ( 0.1666 ) <sup>2</sup>	x 3.14 x 7.48 -	gallons	in one well vol	ume		
{ Well Depth - Water					-		
gall	ons in 3 well	volumes		gal	lons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:				-			
FIELD MEASU							
Time	pH	EC (µS/cm)	Temp °C	Gallons Removed	Appearance		
	-						
Water Level After Pur	ging:	ft. (TOC)		80% of Original Water Level: ft. (TOC)			
Water Level Before Sa	ımpling:	ft. (TOC)					
APPEARANCE OF S.	AMPLE:				Time:		
Bailer: Aqua Bailer Sir	ngle Sample	Type: Disposable Pol	yethylene	GPM:	GPM:		
Submersible:		Туре:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: 19	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	: ТРН-g, ТРН-d.	, BTEX, 5 Fuel Oxyge	nates, Lead Scavenge	rs			
LABORATORY: Alp	LABORATORY: Alpha Analytical						

Project No. 00-750-4				Well No: MW-4		
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	rom TOC: 8.0'	
Global I.D. # T0609700769					r: 4"	
Date: 7/12/2005				Product Level	from TOC: None	
Time:				Water Level f	from TOC: 4.85'	
Recorded by: M. Wi	lmarth			Screened Inte	rval:	
Purge Time (duration	):			Well Elevation	n (TOC): 147.74' above MSL	
			WEAT	ГНЕК		
Wind: 0-5 raph	_			Precip. in last	5 days: 0.00" (STA)	
		VOLUME OF	WATER TO BE R	EMOVED BE	FORE SAMPLING	
( 8.0' -	) x ( 0.1666 )	$(x^2 \times 3.14 \times 7.48 =$	gallons	s in one well vo	olume	
{ Well Depth - Water						
gall	ons in 3 well	volumes		gal	lons removed	
			CALIBR	ATION		
Parameter	Time	Calibration	Before Sampling	Time	After Sampling	
pH:	<del> </del>	-				
EC:				<del>                                     </del>		
			FIELD MEAS	UREMENTS		
Time	pH	EC (µS/cm)	Temp °C	Gallons Appearance		
Time	į	ЕС (ражи)	Temp C	Removed	Арреалисе	
		1				
		<u> </u>		<u> </u>		
				<u> </u>		
<u> </u>	ĺ					
Water Level After Pur	ging:	ft. (TOC)		80% of Original Water Level: ft. (TOC)		
Water Level Before S		ft. (TOC)			-	
APPEARANCE OF SAMPLE:					Time:	
Bailer: Aqua Bailer Si	ngle Sample	Type: Disposable Pol	yethylene	GPM:		
Submersible:		Туре:		GPM:		
Dedicated:		Туре:		GPM:		
DECONTAMINATIO	ON METHOD: T	SP wash and disposabl	le bailers			
SAMPLE ANALYSIS	S: TPH-g, TPH-d	, BTEX, 5 Fuel Oxyge	mates, Lead Scavenge	TS		
LABORATORY: Alpha Analytical						

Project No. 00-750-4 We				Well No: MW-5			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	Well Depth from TOC: 8.5'		
Global I.D. # T0609700769				Well Diamete	Well Diameter: 4"		
Date: 7/12/2005				Product Level	from TOC: None		
Time:				Water Level fi	roin TOC: 4.63'		
Recorded by: M. Wil	lmarth	_		Screened Inter	rval:		
Purge Time (duration)	:			Well Elevation	n (TOC): 147.55' above MSL		
			WEAT	THER			
Wind: 0-5 mph				Precip, in last	5 days: 0.00" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BEI	FORE SAMPLING		
( 8.5'	) x ( 0.1666 )	$^{2}$ x 3.14 x 7.48 =	gallons	in one well vo	lume		
{ Well Depth - Water		radius (ft) }					
gall	ons in 3 well	volumes		gal	lons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
FIELD MEASUREMENTS							
Time	Hq	EC (μS/cm)	Temp °C	Gallons Removed	Аррсагансе		
	_						
Water Level After Purp	ging:	ft. (TOC)		80% of Original Water Level: ft. (TOC)			
Water Level Before Sa	mpling:	ft. (TOC)		_			
APPEARANCE OF S.	AMPLE:				Time:		
Bailer: Aqua Bailer Sir	igle Sample	Type: Disposable Pol	yethylene	GPM:	GPM:		
Submersible:		Туре:		GPM:			
Dedicated:		Туре:		GPM:			
DECONTAMINATIO	N METHOD: TS	SP wash and disposable	e bailers				
SAMPLE ANALYSIS	: TPH-g, TPH-d	BTEX, 5 Fuel Oxyge	nates, Lead Scavenge	rs			
LABORATORY: Al <sub>l</sub>	LABORATORY: Alpha Analytical						

Project No. 00-750-4				Well No: MW-6			
Project Location: 2604 Ventura Ave., Santa Rosa, CA				Well Depth fr	Well Depth from TOC: 15.0'		
Global L.D. # T0609700769				Well Diamete	Well Diameter: 2"		
Date: 7/12/2005				Product Level	I from TOC: None		
Time: 1050				Water Level f	from TOC: 5.58'		
Recorded by: M. Wil	ınarth			Screened Inte	rval: 5'-15'		
Purge Time (duration)	: 8 mins.			Well Elevatio	n (TOC): 147.77 <sup>t</sup> above MSL		
			WEAT	HER			
Wind: 0-5 mph				Precip, in last	5 days: 0.00" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 15' - 5.58'	) x ( 0.08333	$)^2$ x 3.14 x 7.48 =	1.54 gal	llons in one we	il volume		
{ Well Depth - Water I							
4.6 gall	ons in 3 well	volumes		7.5 g	allons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:				_			
FIELD MEASUREMENTS							
Time	рH	EC (µS/cm)	Temp °C	Gallons	Appearance		
1050	7.11	332	23.9	Removed 0.5	Clear, HC odor		
1052	6.67	304	23.3	3	Clear, HC odor		
1055	6.72	332	22.4	6	Dark cloudy, silty, grey, HC odor		
1058	6.72	331	22.9	7.5	Dark cloudy, silty, grey, HC odor		
Water Level After Pur		ft. (TOC)		80% of Origin	nal Water Level: 7.46 ft. (TOC)		
Water Level Before Sa APPEARANCE OF S.		6 ft. (TOC)		<del></del> -	Time: 1208		
				I			
Bailer: Aqua Bailer Sii	ngle Sample	Type: Disposable Pol	yethylene	GPM:			
Submersible:		Туре:		GPM:			
Dedicated:		Type:		GPM:			
DECONTAMINATIO							
SAMPLE ANALYSIS		, BTEX, 5 Fuel Oxyge	mates, Lead Scavenge	ers			
LABORATORY: Al	LABORATORY: Alpha Analytical						

Projcct No. 00-750-	4	"		Well No: M	IW-7			
Project Location: 260	04 Ventura Ave., S	Santa Rosa, CA		Well Depth from TOC: 20.0'				
Global I.D. # T060970	00769			Well Diamete	er: 2"			
Wind: 0-5 mph   VOLUME OF WATER TO B				Product Level	I from TOC: None			
Time: 1016				Water Level f	rom TOC: 5.30'			
Recorded by: M. Wi	lmarth			Screened Inte	rval: 5'-20'			
Purge Time (duration)	8 mins.	_		Well Elevatio	n (TOC): 146.27' above MSL			
			WEAT	HER				
Wind: 0-5 mph					5 days: 0.00" (STA)			
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING			
( 20' ~ 5.30'	) x ( 0.08333	$(x^2 + x^2)^2 \times (3.14 \times 7.48) =$	2,40 gal	llons in one we	Il volume			
{ Well Depth - Water			~					
7.19 ga	llons in 3 we	ll volumes		_7.5g	allons removed			
			CALIBR	ATION	• 44			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling			
pH:								
EC:								
			FIELD MEAS	UREMENTS				
Time	pH	EC (µS/cm)	Temp °C	Gallons Removed	Appearance			
1016	7.17	325	20.3	0.5	Clear			
1019	6.99	331	19.9	3	Cloudy brown			
1022	6.97	330	19.6	6	Cloudy brown			
1024	6.98	331	19.7	7.5	Cloudy brown			
Water Level After Pur	ging: <u>5.95</u>	ft. (TOC)		80% of Origin	al Water Level: 8.24 ft. (TOC)			
Water Level Before Sa	umpling: <u>5.9</u>	<u>\$</u> fl. (TOC)						
					Time: 1033			
Bailer: Aqua Bailer Single Sample Type: Disposable Polyethylene				GPM:				
( 20' - 5.30' ) x ( 0.08333 )² x 3.14 x 7.48 = 2.40				GPM:				
Parameter         Time         Calibration         Before San           pH:         EC:         FIELD           FIELD           Time         pH         EC (μS/cm)         Temp <sup>c</sup> 1016         7.17         325         20.3           1019         6.99         331         19.9           1022         6.97         330         19.6           1024         6.98         331         19.7           Water Level After Purging: 5.95         ft. (TOC)           Water Level Before Sampling: 5.95         ft. (TOC)           APPEARANCE OF SAMPLE: Clear           Bailer: Aqua Bailer Single Sample         Type: Disposable Polyethylene           Submersible:         Type:           Dedicated:         Type:           DECONTAMINATION METHOD: TSP wash and disposable bailers           SAMPLE ANALYSIS: TPH-g, TPH-d, BTEX, 5 Fuel Oxygenates, Lead Set				GPM:				
DECONTAMINATIO	N METHOD: TS	SP wash and disposabl	e bailers					
SAMPLE ANALYSIS	: TPH-g, TPH-d,	BTEX, 5 Fuel Oxyge	nates, Lead Scavenge	rs				
LABORATORY: Alp	pha Analytical							

Project No. 00-750-	4			Well No: M	1W-8		
Wind: 0-5 mph           VOLUME OF WATER TO B           ( 20' - 3.44' ) x ( 0.08333 )² x 3.14 x 7.48 = 2.70           { Well Depth - Water Level } { Well radius (ft) }           8.10         gallons in 3 well volumes           CAL           Parameter         Time         Calibration         Before Sample           pH:         EC:         FIELD M           Time         pH         EC (μS/cm)         Temp °C           949         7.07         274         22.7           952         6.60         283         20.6           959         6.63         280         20.6           959         6.63         280         20.6           Water Level After Purging:         11.70         ft. (TOC)           Water Level Before Sampling:         11.70         ft. (TOC)				Well Depth from TOC: 20.0'			
Global I.D. # T060970	00769		· · · · · · · · · · · · · · · · · ·	Well Diamete	er: 2"		
Date: 7/12/2005				Product Leve	from TOC: None		
Time: 949  Recorded by: M. Wilmarth  Purge Time (duration): 10 mins.  WEA  Wind: 0-5 mph  VOLUME OF WATER TO BE R  ( 20' - 3.44' ) x ( 0.08333 )² x 3.14 x 7.48 = 2.70 ga  { Well Depth - Water Level } { Well radius (ft) }  8.10 gallons in 3 well volumes  CALIBI  Parameter Time Calibration Before Sampling  pH:  EC:				Water Level 1	from TOC: 3.44'		
Recorded by: M. Wilmarth					erval: 5'-20'		
Purge Time (duration)	: 10 mins.			Well Elevatio	on (TOC): 145.95' above MSL		
			WEAT	HER			
Wind: 0-5 mph					1.5 days: 0.00" (STA)		
		VOLUME OF	WATER TO BE RI	EMOVED BE	FORE SAMPLING		
( 20' - 3.44'	) x ( 0.08333	$)^2 \times 3.14 \times 7.48 =$	2.70 gal	lons in one we	ell volume		
8.10 ga	llons in 3 we	II volumes		<u>8.5</u> g	gallons removed		
			CALIBR	ATION			
Parameter	Time	Calibration	Before Sampling	Time	After Sampling		
pH:							
EC:							
			FIELD MEAS	UREMENTS			
Time	рН	EC (μS/cm)	Temp °C	Gallons Removed	Appearance		
949	7.07	274	22.7	0,5	Clear		
952	6.60	286	21.5	3	Slightly cloudy		
955	6.60	283	20.6	6	Cloudy		
959	6.63	280	20.6	8.5	Cloudy brown		
Water Level After Pur	ging: 11.70	ft. (TOC)		80% of Origin	nal Water Level: <u>6.75</u> ft. (TOC)		
Water Level Before Sa	impling: 11	<u>.70</u> ft. (TOC)					
APPEARANCE OF SAMPLE: Clear				Time: 1152			
Bailer: Aqua Bailer Single Sample Type: Disposable Polyethylene				GPM:			
Submersible:		Туре:		GPM:			
Time: 949   Recorded by: M. Wilmarth			GPM:				
DECONTAMINATIO	N METHOD: T	SP wash and disposabl	e bailers				
SAMPLE ANALYSIS	: TPH-g, TPH-d	, BTEX, 5 Fuel Oxyge	nates, Lead Scavenge	rs			
LABORATORY: Alj	pha Analytical						



Alpha Analytical Laboratories Inc.

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21 April 2005

Sonoma County Facility Operations

Attn: Frank Donahue 2680 Ventura Ave

Santa Rosa, CA 95403

RE: SCFO - County Gas Site

Work Order: A504233

Enclosed are the results of analyses for samples received by the laboratory on 04/07/05 17:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks

Project Manager



Alpha Analytical Laboratories Inc.

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#### CHEMICAL EXAMINATION REPORT

Page 1 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3	A504233-01	Water	04/06/05 12:45	04/07/05 17:25
MW-4	A504233-02	Water	04/06/05 12:10	04/07/05 17:25
MW-5	A504233-03	Water	04/06/05 13:35	04/07/05 17:25
MW-6	A504233-04	Water	04/06/05 11:30	04/07/05 17:25
MW-7	A504233-05	Water	04/06/05 16:00	04/07/05 17:25
MW-8	A504233-06	Water	04/06/05 15:10	04/07/05 17:25
BE-4	A504233-07	Water	04/06/05 14:05	04/07/05 17:25
QCTB	A504233-08	Water	04/06/05 08:00	04/07/05 17:25

123-



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#### CHEMICAL EXAMINATION REPORT

Page 2 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 04/21/05 10:52

00-750-4 / 080-6-1769 Project No: SCFO - County Gas Site Project ID:

Order Number A504233

Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP

Client PO/Reference

Alnha	Analytical	Laboratories.	Inc
Albiia	Anaivucai	Laboratories,	Inc.

	Aipha Ahaiyucai Laboi atorics, inc.									
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE		
IW-3 (A504233-01)			Sample Type	e: Water		Sampled: 04/06/05 12:45				
TPH by EPA/LUFT GC/GCMS Methods										
TPH as Diesel	8015DRO	AD52006	04/19/05	04/20/05	1	ND ug/l	50			
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/13/05	"	ND "	50			
Surrogate: Toluene-d8	"	"	"	"		120 % 70	1-129			
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/20/05		68.7 % 20	1-152			
Volatile Organic Compounds by EPA Metl	od 8260B									
Benzene	EPA 8260B	AD51407	04/13/05	04/13/05	1	ND ug/l	0.30			
Toluene	"	"	"	"	"	ND "	0.30			
Ethylbenzene	"	"	"	"	"	ND "	0.50			
Xylenes (total)	"	"	"	"	"	ND "	0.50			
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50			
Di-isopropyl ether	"	"	"	"	"	ND "	0.50			
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50			
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50			
Tert-butyl alcohol	"	"	"	"	"	ND "	10			
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50			
Chlorobenzene	"	"	"	"	"	ND "	0.50			
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50			
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50			
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50			
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50			
Surrogate: Bromofluorobenzene	"	"	"	"		108 % 45	-147			
Surrogate: Dibromofluoromethane	"	"	"	"		108 % 85	-129			
Surrogate: Toluene-d8	"	"	"	"		120 % 74	1-137			
MW-4 (A504233-02)		Sample Type: Water								
TPH by EPA/LUFT GC/GCMS Methods										
TPH as Diesel	8015DRO	AD52006	04/19/05	04/20/05	1	ND ug/l	50			
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/13/05	"	ND "	50			
Surrogate: Toluene-d8	"	"	"	"		114 % 70	1-129			
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/20/05		60.3 % 20	-152			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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#### CHEMICAL EXAMINATION REPORT

Page 3 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

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Alpha Analytical Laboratories, Inc.

Aipna Anaiyticai Laboratories, Inc.								
	METHOD	ВАТСН	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
MW-4 (A504233-02)			Sample Type	: Water	S	ampled: 04/06/05 12:10		
Volatile Organic Compounds by EPA Meth	10d 8260B							
Benzene	EPA 8260B	AD51407	04/13/05	04/13/05	1	ND ug/l	0.30	
Toluene	"	"	"	"	"	ND "	0.30	
Ethylbenzene	"	"	"	"	"	ND "	0.50	
Xylenes (total)	"	"	"	"	"	ND "	0.50	
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50	
Di-isopropyl ether	"	"	"	"	"	ND "	0.50	
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50	
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50	
Tert-butyl alcohol	"	"	"	"	"	ND "	10	
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50	
Chlorobenzene	"	"	"	"	"	ND "	0.50	
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50	
Surrogate: Bromofluorobenzene	"	"	"	"		102 % 45-1	47	
Surrogate: Dibromofluoromethane	"	"	"	"		102 % 85-1	29	
Surrogate: Toluene-d8	"	"	"	"		114 % 74-1	37	
IW-5 (A504233-03)			Sample Type	e: Water	S	ampled: 04/06/05 13:35		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AD52006	04/19/05	04/20/05	1	ND ug/l	50	
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/13/05	"	ND "	50	
Surrogate: Toluene-d8	"	"	"	"		115 % 70-1	29	
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/20/05		59.9 % 20-1	52	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

123-



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### CHEMICAL EXAMINATION REPORT

Page 4 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 04/21/05 10:52

00-750-4 / 080-6-1769 Project No: SCFO - County Gas Site Project ID:

Order Number A504233

Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP

Client PO/Reference

Alnha	Analy	ztical	Labora	tories	Inc
Alpha	Allai	ucai	Labura	tui its.	m.

		P					
	METHOD	ВАТСН	PREPARED	ANALYZED	DILUTION	RESULT	PQL NOTE
MW-5 (A504233-03)			Sample Type	e: Water	Sam	pled: 04/06/05 13:35	
Volatile Organic Compounds by EPA Me	thod 8260B						
Benzene	EPA 8260B	AD51407	04/13/05	04/13/05	1	ND ug/l	0.30
Toluene	"	"	"	"	"	ND "	0.30
Ethylbenzene	"	"	"	"	"	ND "	0.50
Xylenes (total)	"	"	"	"	"	ND "	0.50
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
Chlorobenzene	"	"	"	"	"	ND "	0.50
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		102 %	45-147
Surrogate: Dibromofluoromethane	"	"	"	"		102 %	85-129
Surrogate: Toluene-d8	"	"	"	"		115 %	74-137

MW-6 (A504233-04)

TPH by EPA/LUFT GC/GCMS Methods

·							
TPH as Diesel	8015DRO	AD52006	04/19/05	04/20/05	0.952	840 ug/l	48
TPH as Gasoline	8260GRO	AD51501	04/14/05	04/15/05	50	5000 "	2500
Surrogate: Toluene-d8	"	"	"	"		114 %	70-129
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/20/05		90.8 %	20-152

Sample Type: Water

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Sampled: 04/06/05 11:30

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### CHEMICAL EXAMINATION REPORT

Page 5 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP

Alpha Analytical Laboratories, Inc.

Client PO/Reference

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT		PQL	NOTE
MW-6 (A504233-04)			Sample Type	e: Water	Sam	pled: 04/06/05 11:3	60		
Volatile Organic Compounds by EPA Me	thod 8260B								
Benzene	EPA 8260B	AD51407	04/13/05	04/14/05	5	3.4 ug/l		1.5	
Toluene	"	"	"	"	"	ND "		1.5	R-06
Ethylbenzene	"	"	"	"	"	180 "		2.5	
Xylenes (total)	"	"	"	"	"	140 "		2.5	
Methyl tert-butyl ether	"	"	"	"	"	3.8 "		2.5	
Di-isopropyl ether	"	"	"	"	"	ND "		2.5	R-06
Ethyl tert-butyl ether	"	"	"	"	"	ND "		2.5	R-06
Tert-amyl methyl ether	"	"	"	"	"	ND "		2.5	R-06
Tert-butyl alcohol	"	"	"	"	"	ND "		50	R-06
1,2-Dichloroethane	"	"	"	"	"	ND "		2.5	R-06
Chlorobenzene	"	"	"	"	"	ND "		2.5	R-06
1,3-Dichlorobenzene	"	"	"	"	"	ND "		2.5	R-06
1,4-Dichlorobenzene	"	"	"	"	"	ND "		2.5	R-06
1,2-Dichlorobenzene	"	"	"	"	"	ND "		2.5	R-06
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "		2.5	R-06
Surrogate: Bromofluorobenzene	"	"	"	"		112 %	45-147		
Surrogate: Dibromofluoromethane	"	"	"	"		96.8 %	85-129		
Surrogate: Toluene-d8	"	"	"	"		122 %	74-137		

MW-7 (A504233-05) Sample Type: Water Sampled: 04/06/05 16:00 TPH by EPA/LUFT GC/GCMS Methods

TPH as Diesel 8015DRO AD52006 04/19/05 04/20/05 1 ND ug/l TPH as Gasoline 8260GRO 04/13/05 04/14/05 ND " AD51402 Surrogate: Toluene-d8 120 % 70-129 8015DRO 04/20/05 98.1 % 20-152 Surrogate: 1,4-Bromofluorobenzene AD52006 04/19/05

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123-

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### CHEMICAL EXAMINATION REPORT

Page 6 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

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Alnha	Anal	vtical	Labora	tories	Inc
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		Аірпа	Analytical	Laboratori	es, inc.			
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
/W-7 (A504233-05)			Sample Type	: Water	S	ampled: 04/06/05 16:00		
Volatile Organic Compounds by EPA Metl	hod 8260B							
Benzene	EPA 8260B	AD51407	04/13/05	04/14/05	1	ND ug/l	0.30	
Toluene	"	"	"	"	"	ND "	0.30	
Ethylbenzene	"	"	"	"	"	ND "	0.50	
Xylenes (total)	"	"	"	"	"	ND "	0.50	
Methyl tert-butyl ether	"	"	"	"	"	4.3 "	0.50	
Di-isopropyl ether	"	"	"	"	"	ND "	0.50	
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50	
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50	
Tert-butyl alcohol	"	"	"	"	"	ND "	10	
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50	
Chlorobenzene	"	"	"	"	"	ND "	0.50	
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50	
Surrogate: Bromofluorobenzene	"	"	"	"		106 %	45-147	
Surrogate: Dibromofluoromethane	"	"	"	"		108 %	85-129	
Surrogate: Toluene-d8	"	"	"	"		120 %	74-137	
IW-8 (A504233-06)			Sample Type	e: Water	s	ampled: 04/06/05 15:10		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AD52006	04/19/05	04/21/05	1	ND ug/l	50	
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/14/05	"	ND "	50	
Surrogate: Toluene-d8	"	"	"	"		121 %	70-129	
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/21/05		98.1 %	20-152	

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### CHEMICAL EXAMINATION REPORT

Page 7 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

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		Aipiia	Analytical	Laboratori	es, inc.			
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
MW-8 (A504233-06)			Sample Type	: Water	Sa	ampled: 04/06/05 15:10		
Volatile Organic Compounds by EPA Metl	hod 8260B							
Benzene	EPA 8260B	AD51407	04/13/05	04/14/05	1	ND ug/l	0.30	
Toluene	"	"	"	"	"	ND "	0.30	
Ethylbenzene	"	"	"	"	"	ND "	0.50	
Xylenes (total)	"	"	"	"	"	ND "	0.50	
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50	
Di-isopropyl ether	"	"	"	"	"	ND "	0.50	
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50	
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50	
Tert-butyl alcohol	"	"	"	"	"	ND "	10	
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50	
Chlorobenzene	"	"	"	"	"	ND "	0.50	
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50	
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50	
Surrogate: Bromofluorobenzene	"	"	"	"		107 %	45-147	
Surrogate: Dibromofluoromethane	"	"	"	"		106 %	85-129	
Surrogate: Toluene-d8	"	"	"	"		121 %	74-137	
E-4 (A504233-07)			Sample Type	: Water	Sa	ampled: 04/06/05 14:05		
TPH by EPA/LUFT GC/GCMS Methods								
TPH as Diesel	8015DRO	AD52006	04/19/05	04/21/05	1	ND ug/l	50	
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/14/05	"	ND "	50	
Surrogate: Toluene-d8	"	"	"	"		120 %	70-129	
Surrogate: 1,4-Bromofluorobenzene	8015DRO	AD52006	04/19/05	04/21/05		94.8 %	20-152	

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Page 8 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

Alnha	Analy	ztical	Laborat	ories	Inc
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Alpha Analytical Laboratories, Inc.											
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE			
BE-4 (A504233-07)			Sample Type	e: Water	Sa	mpled: 04/06/05 14:0	5				
Volatile Organic Compounds by EPA Meth	hod 8260B										
Benzene	EPA 8260B	AD51407	04/13/05	04/14/05	1	ND ug/l	0.30				
Toluene	"	"	"	"	"	ND "	0.30				
Ethylbenzene	"	"	"	"	"	ND "	0.50				
Xylenes (total)	"	"	"	"	"	ND "	0.50				
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50				
Di-isopropyl ether	"	"	"	"	"	ND "	0.50				
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50				
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50				
Tert-butyl alcohol	"	"	"	"	"	ND "	10				
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50				
Chlorobenzene	"	"	"	"	"	ND "	0.50				
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.50				
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.50				
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.50				
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50				
Surrogate: Bromofluorobenzene	"	"	"	"		105 %	45-147				
Surrogate: Dibromofluoromethane	"	"	"	"		110 %	85-129				
Surrogate: Toluene-d8	"	"	"	"		120 %	74-137				
QCTB (A504233-08)			Sample Type	e: Water	Sa	mpled: 04/06/05 08:0	0				
TPH by EPA/LUFT GC/GCMS Methods											
TPH as Gasoline	8260GRO	AD51402	04/13/05	04/14/05	1	ND ug/l	50				
Surrogate: Toluene-d8	"	"	"	"		116 %	70-129				

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123-

Nena M. Burgess For Sheri L. Speaks Project Manager 4/21/2005



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### CHEMICAL EXAMINATION REPORT

Page 9 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

SourceResult
TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD51402 - EPA 5030 Water GCMS										
Blank (AD51402-BLK1)				Prepared &	Analyzed	04/13/05				
TPH as Gasoline	ND	50	ug/l							
Surrogate: Toluene-d8	28.5		"	25.0		114	70-129			
LCS (AD51402-BS1)				Prepared &	Analyzed	04/13/05				
TPH as Gasoline	171	50	ug/l	200		85.5	65-137			
Surrogate: Toluene-d8	29.1		"	25.0		116	70-129			
LCS Dup (AD51402-BSD1)				Prepared &	Analyzed	04/13/05				
TPH as Gasoline	166	50	ug/l	200		83.0	65-137	2.97	20	
Surrogate: Toluene-d8	29.1		"	25.0		116	70-129			
Matrix Spike (AD51402-MS1)	Sour	ce: A50423	3-01	Prepared &	Analyzed	04/13/05				
TPH as Gasoline	162	50	ug/l	200	ND	81.0	65-137			
Surrogate: Toluene-d8	31.9		"	25.0		128	70-129			
Batch AD51501 - EPA 5030 Water GCMS										
Blank (AD51501-BLK1)				Prepared &	Analyzed	04/14/05				
TPH as Gasoline	ND	50	ug/l							
Surrogate: Toluene-d8	28.9		"	25.0		116	70-129			
LCS (AD51501-BS1)				Prepared &	Analyzed	04/14/05				
TPH as Gasoline	211	50	ug/l	200		106	65-137			
Surrogate: Toluene-d8	29.6		"	25.0		118	70-129			
LCS Dup (AD51501-BSD1)				Prepared &	Analyzed	04/14/05				
TPH as Gasoline	204	50	ug/l	200		102	65-137	3.37	20	

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### CHEMICAL EXAMINATION REPORT

Page 10 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

TPH by	, FDA/I HFT	GC/GCMS Methods	Quality Control
1 1 11 17 17 17	/ P/ A/ L/U) P L	TTT /TTT IVES IVELLIOUS	- Chianty Continu

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD51501 - EPA 5030 Water GCMS										
LCS Dup (AD51501-BSD1)				Prepared &	Analyzed:	04/14/05				
Surrogate: Toluene-d8	30.9		"	25.0		124	70-129			
Matrix Spike (AD51501-MS1)	Sour	ce: A50424	1-02	Prepared &	: Analyzed:	04/14/05				
TPH as Gasoline	1050	50	ug/l	200	800	125	65-137			
Surrogate: Toluene-d8	29.6		"	25.0		118	70-129			
Batch AD52006 - EPA 3510B Water										
Blank (AD52006-BLK1)				Prepared: (	04/19/05 A	nalyzed: 04	/20/05			
TPH as Diesel	ND	50	ug/l							
Surrogate: 1,4-Bromofluorobenzene	536		"	579		92.6	20-152			
LCS (AD52006-BS1)				Prepared: (	04/19/05 A	nalyzed: 04	-/20/05			
TPH as Diesel	2460	50	ug/l	1960		126	52-136			
Surrogate: 1,4-Bromofluorobenzene	589		"	579		102	20-152			
LCS Dup (AD52006-BSD1)				Prepared: (	04/19/05 A	nalyzed: 04	-/20/05			
TPH as Diesel	2330	50	ug/l	1960		119	52-136	5.43	25	
Surrogate: 1,4-Bromofluorobenzene	548		"	579		94.6	20-152			

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# CHEMICAL EXAMINATION REPORT

Page 11 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25 Client Code SCFACOP Client PO/Reference

### **Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD51407 - EPA 5030 Water GCMS										
Blank (AD51407-BLK1)				Prepared &	α Analyzed:	04/13/05				
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Tert-amyl methyl ether	ND	0.50	"							
Tert-butyl alcohol	ND	10	"							
1,2-Dichloroethane	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Surrogate: Bromofluorobenzene	25.6		"	25.0		102	45-147			
Surrogate: Dibromofluoromethane	25.7		"	25.0		103	85-129			
Surrogate: Toluene-d8	28.5		"	25.0		114	74-137			
LCS (AD51407-BS1)				Prepared &	λ Analyzed:	04/13/05				
Benzene	10.6	0.30	ug/l	10.0		106	79-116			
Toluene	11.7	0.30	"	10.0		117	83-120			
Ethylbenzene	11.9	0.50	"	10.0		119	81-119			
Xylenes (total)	35.3	0.50	"	30.0		118	79-121			
Methyl tert-butyl ether	10.1	0.50	"	10.0		101	73-127			
Di-isopropyl ether	10.3	0.50	"	10.1		102	69-96			QL-
Ethyl tert-butyl ether	9.70	0.50	"	10.2		95.1	76-117			

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123-

Nena M. Burgess For Sheri L. Speaks Project Manager 4/21/2005



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# CHEMICAL EXAMINATION REPORT

Page 12 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

**Volatile Organic Compounds by EPA Method 8260B - Quality Control** 

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD51407 - EPA 5030 Water GCMS	s									
LCS (AD51407-BS1)				Prepared &	α Analyzed:	04/13/05				
Tert-amyl methyl ether	10.6	0.50	"	10.3		103	80-122			
Tert-butyl alcohol	186	10	"	196		94.9	53-132			
1,2-Dichloroethane	10.2	0.50	"	10.0		102	78-115			
Chlorobenzene	10.8	0.50	"	10.0		108	82-112			
1,3-Dichlorobenzene	11.1	0.50	"	10.0		111	82-117			
1,4-Dichlorobenzene	10.5	0.50	"	10.0		105	85-113			
1,2-Dichlorobenzene	10.4	0.50	"	10.0		104	83-113			
1,2-Dibromoethane (EDB)	11.2	0.50	"	10.0		112	84-117			
Surrogate: Bromofluorobenzene	27.6		"	25.0		110	45-147			
Surrogate: Dibromofluoromethane	24.2		"	25.0		96.8	85-129			
Surrogate: Toluene-d8	28.0		"	25.0		112	74-137			
LCS Dup (AD51407-BSD1)				Prepared &	Analyzed:	04/13/05				
Benzene	9.45	0.30	ug/l	10.0		94.5	79-116	11.5	25	
Toluene	10.7	0.30	"	10.0		107	83-120	8.93	25	
Ethylbenzene	10.7	0.50	"	10.0		107	81-119	10.6	25	
Xylenes (total)	32.0	0.50	"	30.0		107	79-121	9.81	25	
Methyl tert-butyl ether	9.77	0.50	"	10.0		97.7	73-127	3.32	25	
Di-isopropyl ether	9.50	0.50	"	10.1		94.1	69-96	8.08	25	
Ethyl tert-butyl ether	9.34	0.50	"	10.2		91.6	76-117	3.78	25	
Tert-amyl methyl ether	10.0	0.50	"	10.3		97.1	80-122	5.83	25	
Tert-butyl alcohol	192	10	"	196		98.0	53-132	3.17	25	
1,2-Dichloroethane	9.45	0.50	"	10.0		94.5	78-115	7.63	25	
Chlorobenzene	9.83	0.50	"	10.0		98.3	82-112	9.40	25	
1,3-Dichlorobenzene	10.0	0.50	"	10.0		100	82-117	10.4	25	
1,4-Dichlorobenzene	9.82	0.50	"	10.0		98.2	85-113	6.69	25	
1,2-Dichlorobenzene	9.64	0.50	"	10.0		96.4	83-113	7.58	25	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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### CHEMICAL EXAMINATION REPORT

Page 13 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A504233 Receipt Date/Time 04/07/2005 17:25

Client Code SCFACOP Client PO/Reference

### **Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD51407 - EPA 5030 Water GCMS										
LCS Dup (AD51407-BSD1)				Prepared &	k Analyzed:	04/13/05				
1,2-Dibromoethane (EDB)	10.5	0.50	"	10.0		105	84-117	6.45	25	
Surrogate: Bromofluorobenzene	26.0		"	25.0		104	45-147			
Surrogate: Dibromofluoromethane	22.4		"	25.0		89.6	85-129			
Surrogate: Toluene-d8	26.1		"	25.0		104	74-137			
Matrix Spike (AD51407-MS1)	Sour	ce: A50418	9-01	Prepared &	ል Analyzed:	04/13/05				
Benzene	5.54	0.30	ug/l	10.0	ND	55.4	63-144			QM-05
Toluene	6.27	0.30	"	10.0	ND	62.7	65-145			QM-05
Ethylbenzene	6.00	0.50	"	10.0	ND	60.0	57-155			
Xylenes (total)	17.8	0.50	"	30.0	ND	59.3	59-149			
Methyl tert-butyl ether	5.00	0.50	"	10.0	ND	50.0	62-156			QM-05
Di-isopropyl ether	5.49	0.50	"	10.1	ND	54.4	58-115			QM-05
Ethyl tert-butyl ether	5.13	0.50	"	10.2	ND	50.3	57-147			QM-05
Tert-amyl methyl ether	5.29	0.50	"	10.3	ND	51.4	53-153			QM-05
Tert-butyl alcohol	112	10	"	196	ND	57.1	41-147			
1,2-Dichloroethane	5.50	0.50	"	10.0	ND	55.0	61-134			QM-05
Chlorobenzene	5.75	0.50	"	10.0	ND	57.5	62-139			QM-05
1,3-Dichlorobenzene	5.49	0.50	"	10.0	ND	54.9	59-140			QM-05
1,4-Dichlorobenzene	5.45	0.50	"	10.0	ND	54.5	62-136			QM-05
1,2-Dichlorobenzene	5.25	0.50	"	10.0	ND	52.5	62-137			QM-05
1,2-Dibromoethane (EDB)	5.67	0.50	"	10.0	ND	56.7	58-140			QM-05
Surrogate: Bromofluorobenzene	26.9		"	25.0		108	45-147			
Surrogate: Dibromofluoromethane	23.8		"	25.0		95.2	85-129			
Surrogate: Toluene-d8	27.3		"	25.0		109	74-137			

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#### CHEMICAL EXAMINATION REPORT

Page 14 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 04/21/05 10:52

Project No: 00-750-4 / 080-6-1769 SCFO - County Gas Site Project ID:

Order Number A504233

Receipt Date/Time 04/07/2005 17:25

Client Code **SCFACOP** 

Client PO/Reference

#### **Notes and Definitions**

R-06 The Reporting Limits for this analysis have been raised to account for matrix interference.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS

and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is

acceptable.

QL-03 Although the LCS/LCSD recovery for this analyte is outside of in-house developed control limits, it is within

the EPA recommended range of 70-130%.

D-08 Results in the diesel organics range are primarily due to overlap from a gasoline range product.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

**RPD** Relative Percent Difference

**PQL** Practical Quantitation Limit



# Work Order Chain of Custody Record

Alpha Analytical Laboratories Inc

208 Mason Street, Ukiah, California 95482

168-5267 Lab No. Page of

Company Name:		Project N	ame:			T	Project	Numb	er:				Signa	ature	below	auth	orizes	worl	k und	er te	rms s	tated	on rev	erse/	side.	ار المالية المالية
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Project Contact (Hardcopy or PDF to):		P.O. #				7	Quote	#.						M						V.					48 hr	<b>.</b>
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Sample		· · · · · · · · · · · · · · · · · · ·	40ml V	Jy The	eeve	5	HZSO4	J. C	Water			,		N	7										(standard)	
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22 July 2005

Sonoma County Facility Operations

Attn: Frank Donahue 2680 Ventura Ave

Santa Rosa, CA 95403

RE: SCFO - County Gas Site

Work Order: A507277

Enclosed are the results of analyses for samples received by the laboratory on 07/12/05 16:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa E. Jansen For Sheri L. Speaks

Lisa Jansen

Project Manager

208 Mason St. Ukiah, California 95482

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### CHEMICAL EXAMINATION REPORT

Page 1 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

A507277

07/12/2005 16:15

SCFACOP

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BE 4	A507277-01	Water	07/12/05 11:25	07/12/05 16:15
MW-6	A507277-02	Water	07/12/05 12:08	07/12/05 16:15
MW- 7	A507277-03	Water	07/12/05 10:33	07/12/05 16:15
MW-8	A507277-04	Water	07/12/05 11:52	07/12/05 16:15
QCTB	A507277-05	Water	07/12/05 07:15	07/12/05 16:15

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Lisa E. Jansen For Sheri L. Speaks Project Manager

7/22/05



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# CHEMICAL EXAMINATION REPORT

Page 2 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

A507277

07/12/2005 16:15

SCFACOP

		Alpha A	nalytical	Laborator	ries, Inc.				
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT		PQ1_	NOTE
BE 4 (A507277-01)			Sample Ty	pe: Water	Sar	npled: 07/12/05 1	1:25	-	
TPH by EPA/LUFT GC/GCMS Meth	ods								
TPH as Diesel	8015DRO	AG51413	07/14/05	07/15/05	1	ND ug/l		50	
TPH as Gasoline	8260GRO	AG52001	07/18/05	07/20/05	"	ИD "		50	
Surrogate: Tetratetracontane	8015DRO	AG51413	07/14/05	07/15/05		96.4 %	20-152		
Surrogate: Toluene-d8	8260GRO	AG52001	07/18/05	07/20/05		96.8 %	70-129		
Volatile Organic Compounds by EPA	Method 8260B								
Benzene	- EPA 8260B	AG52006		07/20/05	1	ND ug/l		0.30	
Toluene	**	···	"	19	**	ND "		0.30	
Ethylbenzene	11	h	II .	**	.,	ND "		0.50	
Xylenes (total)	"	II .	"	**	**	ND"		0.50	
Methyl tert-butyl ether	ie	11		*1	11	ND "		0.50	
Di-isopropyl ether		li			*1	ND "		0.50	
Ethyl tert-butyl ether	**	li .		11	*1	ND "		0.50	
Tert-amyl methyl ether		"	11		1+	ND "		0.50	
Tert-butyl alcohol		"	re		ır	ND "		10	
1,2-Dichloroothane	2*	п	18		· ·	ND "		0.50	
Chlorobenzene	"	ш	10		16	ND "		0.50	
1,3-Dichlorobenzene	r	ш	*	**	**	ND "		0.50	
I,4-Dichlorobenzene	19	ч	14	ч		ND "		0.50	
1,2-Dichlorobenzene	11	16	н		"	ND "		0.50	
1,2-Dibromoethane (EDB)	**	"	**	11		ND "		0.50	
Surrogate: Bromofluorobenzene	,,	Ħ	11	11		103 %	78-138		
Surrogate: Dibromofluoromethane	o	**	"	52		90.0 %	71-136		
Surrogate: Toluene-d8	p	и	"	n		96.8 %	88-139		

MW-6 (A507277-02)

TPH by EPA/LUFT GC/GCMS Methods

TPH as Diesel 8015DRO AG51413 07/14/05 07/15/05 0.9302 740 ug/l 47 D-07 5700 ° TPH as Gasoline 8260GRO 07/18/05 07/20/05 20 1000 AG52001 99.1 % 07/14/05 20-152 Surrogote: Tetratetracontane 8015DRO AG51413 07/15/05 96.0 % 07/18/05 07/20/05 70-129 Surrogate: Toluene-d8 8260GRO AG52001

Sample Type: Water

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sampled: 07/12/05 12:08

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# CHEMICAL EXAMINATION REPORT

Page 3 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code **SCFACOP** 

Client PO/Reference

A507277

07/12/2005 16:15

		Alpha A	nalytical	Laborato	ries, Inc.			
	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
MW- 6 (A507277-02)	· -		Sample Typ	pe: Water	,	Sampled: 07/12/05 12:08	8	
Volatile Organic Compounds by EPA	Method 8260B							
Benzene	EPA 8260B	AG52112	н	07/21/05	1	3.3 ug/l	0.30	
Toluene	"	n	)1	-1	**	0.63 "	0.30	
Ethylbenzene	4			07/20/05	20	150 "	10	
Xylenes (total)	18		11+	,,	"	150 "	10	
Methyl tert-butyl ether	н	**		07/21/05	1	2.5 "	0.50	
Di-isopropyl ether	14	18	**	32	11	ND "	0.50	
Ethyl tert-butyl ether	- п	84	71	D D	н	ND "	0.50	
Tert-amyl methyl ether	"	**	18	"	ŧı	ND "	0.50	
Tert-butyl alcohol	п	н	"		*	ND "	10	
1,2-Dichloroethane	и	h	н	•	11	ND "	0.50	
Chlorobenzene	t)	н	18	н	))	ND "	0.50	
1,3-Dichlorobenzene	+3	U	.,	"	b	ND "	0.50	
1,4-Dichlorobenzene	v	tt.	н	"	"	ND"	0.50	
1,2-Dichlorobenzene	п	9	n	"	ч	ND "	0.50	
1,2-Dibromoethane (EDB)	n	n	ц	"	14	ND "	0.50	
Surrogate: Bromofluorobenzene	n	11	n	"		108 %	78-138	
Surrogate: Dibromofluoromethane	a a	if	и	u		85.6 %	71-136	
Surrogate: Taluenc-d8	н	if	"	"		94.4 %	88-139	
MW- 7 (A507277-03)		,	Sample Ty	pe: Water		Sampled: 07/12/05 10:3.	3	
TPH by EPA/LUFT GC/GCMS Metho	ods							
TPH as Diesel	8015DRO	AG51413	07/14/05	07/15/05	1	ND ug/l	50	
TPH as Gasoline	8260GRO	AG52001	07/18/05	07/20/05	it	ND"	50	
Surrogate: Tetratetracontane	8015DRO	AG51413	07/14/05	07/15/05		82.3 %	20-152	•
Surrogate: Toluene-d8	8260GRO	AG52001	07/18/05	07/20/05		99.2 %	70-129	



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# CHEMICAL EXAMINATION REPORT

Page 4 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number A507277

Receipt Date/Time 07/12/2005 16:15 Client Code SCFACOP

Client PO/Reference

		Alpha A	nalytical	Laborato	ries, Inc.		
	METHOD	ВАТСН	PREPARED	ANALYZED	DILUTION	RESULT	PQL NO
MW- 7 (A507277-03)			Sample Typ	e: Water		Sampled: 07/12/05 10	:33
Volatile Organic Compounds by EPA	Method 8260B						
Benzene	EPA 8260B	AG52006	**	07/20/05	1	ND ug/l	0.30
Toluene	*1	и	19	**	и	ND "	0.30
Ethylbenzene	"	**	"	h	"	ND "	0.50
Xylenes (total)	**	"	n	16	"	ND "	0.50
Methyl tert-butyl other	11	II.	**	11	u	4.8 "	0.50
Di-isopropyl ether	"	u	49	"	.11	ND "	0.50
Ethyl tort-butyl other	. "	μ	и	"	u	ND "	0.50
Tert-amyl methyl ether	н	11	н	n	ш	ND "	0.50
Tert-butyl alcohoi	"	ø	и	rt	"	ND "	10
1,2-Dichloroethane	"	U	"	n	**	ND "	0.50
Chlorobenzene	"	19	ч		11	ND "	0.50
1,3-Dichlorobenzene	11	R	u	Ft	**	ND "	0.50
1,4-Dichlorohenzene	н	***	ч	P	**	ND "	0.50
1,2-Dichlorobenzene	"	**	"	"	14	ND "	0.50
1,2-Dibromoethane (EDB)	"	**	п	"	14	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		106 %	78-138
Surrogote: Dibromofluoromethane	"	"	n	"		93.6 %	71-136
Surrogate: Toluene-d8	"	"	n	"		99.2 %	88-139
MW-8 (A507277-04)		;	Sample Typ	pe: Water		Sampled: 07/12/05 11	:52
TPH by EPA/LUFT GC/GCMS Metho	ods						
TPH as Diesel	8015DRO	AG51413	07/14/05	07/15/05	1	ND ug/l	50
TPH as Gasoline	8260GRO	AG52001	07/18/05	07/20/05	n	ND "	50
Surrogate: Tetratetracontane	8015DRO	AG51413	07/14/05	07/15/05		93.6 %	20-152
Surrogate: Toluene-d8	8260GRO	AG52001	07/18/05	07/20/05		97.2 %	70-129

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Lisa E. Jausen For Sheri L. Speaks Project Manager

7/22/05



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# CHEMICAL EXAMINATION REPORT

Page 5 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Receipt Date/Time

Client Code SCFACOP

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Report Date: 07/22/05 10:43

Client PO/Reference

Order Number A507277

07/12/2005 16:15

METHOD  Sethod 8260B	BATCH		ANALYZED	DILUTION	RESULT	PQL NOTE
lethod 8260B		Sample Tu				
lethod 8260B		Sample 13	pe: Water	S	ampled: 07/12/05 1	1:52
					•	
EPA 8260B	AG52006	"	07/20/05	1	ND ug/l	0.30
н	"	н	D.		ND "	0.30
**	10	ч	"	4	ND"	0.50
*1	**	10	"	II .	ND"	0.50
'n	*1	n		**	ND"	0.50
"	**	*1		#1	ND"	0.50
,	"	п			ND "	0.50
17	"	"	11		ND "	0.50
**	*1	1*	14		ND "	10
"	*1	11	**	10	ND "	0.50
11	10	"	"	**	ND "	0.50
**	**	"			ND "	0.50
*1	+7	ч	я		ND "	0.50
"	н	87	а		ND "	0.50
	"	41	**	**	ND "	0.50
"	н	"	17		104%	78-138
17	"	"	"		92.4 %	71-136
"	r	14	"		97.2 %	88-139
		Sample Ty	pe: Water	S	ampled: 07/12/05 0	7:15
	EPA 8260B	EPA 8260B AG52006	EPA 8260B AG52006 " """"""""""""""""""""""""""""""""""	EPA 8260B AG52006 " 07/20/05 " " " " " " " " " " " " " " " " " " "	EPA 8260B AG52006 " 07/20/05 1 " " " " " " " " " " " " " " " " " " "	EPA 8260B AG52006 " 07/20/05 1 ND ug/l " " " " " ND " ND " ND " ND " ND " ND "

TPH by EPA/LUFT GC/GCMS Methods

TiPH as Gasolime 8260GRO AG52001 07/18/05 07/20/05 ND week 70-129

Surrogate: Tolueme-dl8 96.4 %



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# CHEMICAL EXAMINATION REPORT

Page 6 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Receipt Date/Time

Client Code

Report Date: 07/22/05 10:43 Project No: 00-750-4 / 080-6-1769

Project ID: SCFO - County Gas Site

Order Number A507277

07/12/2005 16:15

SCFACOP

Client PO/Reference

# TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analytc(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG51413 - EPA 3510B Water										
Blank (AG51413-BLK1)				Prepared	& Analyz	ed: 07/14/0	05			
TPH as Diesel	ND	50	ug/l							
Surrogate: Tetratetracontane	10.4		"	11.0		94.5	20-152			
LCS (AG51413-BS1)				Prepared	& Analyz	ed: 07/14/0	05			
TPH as Diesel	1370	50	ug/l	2003		68.5	52-136			
Surrogame: Tetratetracontane	11.3		M	11.0		103	20-152			
Matrix Spike (AG51413-MS1)	Sou	rce: A5072	238-03	Prepared	& Analyz	ed: 07/14/	05			
TPH as Diesel	1420	50	ug/l	2000	ND	68.6	61-129			
Surrogate: Tetratetracontane	10.8		#	11.0		98.2	20-152			
Matrix Spike Dup (AG51413-MSD1)	Sou	rce: A507	238-03	Prepared	& Analyz	ed: 07/14/	05			
TPH as Diesel	1430	50	wg/l	2000	ND	69.1	61-129	0.702	25	
Surrogate: Tetratetracontane	9.95		D	11.0		90.5	20-152			
Batch AG52001 - EPA 5030 Water G	CMS									
Blank (AG52001-BLK1)				Prepared:	07/18/05	Analyzed	£ 07/19/05			
TPH as Gasoline	ND	50	110/1							
	ND	30	ng/l							
	24.8		ng/1	25.0		99.2	70-129			
Surrogane: Tohnerie-38					07/18/05		70-129 1: 07/39/05			
Surragane: Toluene-d8  LCS (AG52001-BS1)		50			07/18/05					
Surrogene: Toluene-dS  LCS (AG52001-BS1)  TPH as Gasofine	24.8		er.	Prepared:	07/18/05	Analyzed	1: 07/19/05		7	
Surrogate: Toluene-d8  LCS (AG52001-BS1)  TPH as Gasofine  Surragate: Toluene-d8  LCS Dup (AG52001-BSD1)	24.8		ug/l	200 25.0		98.0 100	1: 07/39/05 65-137		-	



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# CHEMICAL EXAMINATION REPORT

Page 7 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769

Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

A507277

07/12/2005 16:15

SCFACOP

Т	PH by EPA/LU	FT GC/	GCMS	Methods	s - Quali	ity Cont	rol			
Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52001 - EPA 5030 Water	GCMS									
LCS Dup (AG52001-BSDI)				Prepared:	07/18/05	Analyzed	07/19/05			
Surrogate: Toluene-d8	24.8		#	25.0		99.2	70-129			
Matrix Spike (AG52001-MS1)	Sour	ce: A507	227-02	Prepared:	07/18/05	Analyzed	: 07/19/05			
TPH as Gasoline	170	50	ug/l	200	ND	73.5	65-137			
Surrogate: Toluene-d8	24.5		п	25.0		98.0	70-129			



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# CHEMICAL EXAMINATION REPORT

Page 8 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403 Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

A507277

07/12/2005 16:15

SCFACOP

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52006 - EPA 5030 Water	r GCMS									
Blank (AG52006-BLK1)				Prepared:	07/18/05	Analyzed	: 07/19/05			
Benzene	ND	0.30	ug/l			-			<del></del>	
Toluene	ND	0.30								
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	n							
Methyl tert-butyl ether	ND	0.50	**							
Di-isopropyl ether	ND	0.50	**							
Ethyl tert-butyl ether	ND	0.50	**							
Tert-amyl methyl ether	ND	0.50	11							
Tert-butyl alcohol	ND	10	11							
1,2-Dichloroethane	ND	0.50	"							
Chlorobenzene	ND	0.50								
1,3-Dichlorobenzene	ND	0.50	*1							
1,4-Dichlorobenzene	ND	0.50	*1							
1,2-Dichlorobenzene	ND	0.50	н							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Surrogate: Bromofluorobenzene	26.1		H	25.0		104	78-138			
Surrogate: Dibromofluoromethane	23.0		*	25.0		92.0	71-136			
Surrogate: Toluene-d8	24.8		н	25.0		99.2	88-139			
LCS (AG52006-BS1)				Prepared:	07/18/05	Analyzed	l: 07/19/05			
Benzene	10.5	0.30	ug/l	10.0		105	68-129			
Tolucne	10.2	0.30		10.0		102	76-137			
Ethylbenzene	10.5	0.50		10.0		105	78-136			
Xylenes (total)	30.8	0.50		30.0		103	76-134			
Methyl tert-butyl ether	10.1	0.50	44	10.0		101	64-141			
Di-isopropyl ether	10.3	0.50	**	10.1		102	80-132			
Ethyl tert-butyl ether	10.4	0.50	**	10.2		102	66-138			



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# CHEMICAL EXAMINATION REPORT

Page 9 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Order Number Receipt Date/Time

A507277

07/12/2005 16:15

Client Code

SCFACOP

Project ID: SCFO - County Gas Site Client PO/Reference

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52006 - EPA 5030 Wate	r GCMS			· <b>-</b>					'	
LCS (AG52006-BS1)				Prepared:	07/18/05	Analyzed	l: 07/19/05			
Tert-amyl methyl ether	10.1	0.50	11	10.3		98.1	58-142			
Tert-butyl alcohol	174	10	п	196		88.8	70-139			
1,2-Dichloroethane	10.6	0.50	"	10.0		106	65-125			
Chlorobenzene	10.4	0.50	11	10.0		104	75-127			
1,3-Dichlorobenzene	10.4	0.50	"	10,0		104	78-129			
1,4-Dichlorobenzene	10.6	0.50	и	10.0		106	82-124			
1,2-Dichlorobenzene	10.3	0.50	н	10.0		103	81-125			
1,2-Dibromoethane (EDB)	10.5	0.50	*1	10.0		105	80-130			
Surrogate: Bromofluorobenzene	24.9		re .	25.0		99.6	78-138			
Surrogate: Dibromofluoromethane	23.2		11	25.0		92.8	71-136			
Surrogate: Toluene-d8	23.1		,,	25.0		92.4	88-139			
LCS Dup (AG52006-BSD1)				Prepared	: 07/18/05	Analyzed	l: 07/19/05			
Benzene	10.7	0.30	ug/l	10.0		107	68-129	1.89	25	
Toluene	10.4	0.30	n .	10.0		104	76-137	1.94	25	
Ethylbenzene	10.7	0.50	11	10.0		107	78-136	1.89	25	
Xylenes (total)	31.3	0.50	*1	30.0		104	76-134	1.61	25	
Methyl tert-hutyl ether	10.3	0.50	11	10.0		103	64-141	1.96	25	
Di-isopropyl ether	10.6	0.50	**	10.1		105	80-132	2.87	25	
Ethyl tert-butyl ether	10.5	0.50	16	10.2		103	66-138	0.957	25	
Tert-amyl methyl ether	10.3	0.50	n	10.3		100	58-142	1.96	25	
Tert-butyl alcohol	189	10	10	196		96.4	70-139	8.26	25	
1,2-Dichloroethane	10.8	0.50	**	10.0		108	65-125	1.87	25	
Chlorohenzene	10.6	0.50	0	10.0		106	75-127	1.90	25	
1,3-Dichlorobenzene	10.6	0.50		10.0		106	78-129	1.90	25	
1,4-Dichlorobenzene	10.8	0.50		10.0		108	82-124	1.87	25	
1,2-Dichlorobenzene	10.5	0.50	п	10.0		105	81-125	1.92	25	



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Page 10 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Receipt Date/Time 07/12/2005 16:15

Client Code **SCFACOP** 

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Report Date: 07/22/05 10:43

Client PO/Reference

Order Number A507277

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52006 - EPA 5030 Water	r GCMS									
LCS Dup (AG52006-BSD1)				Prepared:	07/18/05	Analyzed	: 07/19/05			
1,2-Dibromoethane (EDB)	10.6	0.50	н	10.0		106	80-130	0.948	25	
Surrogate: Bromofluorobenzene	25.0			25.0		100	78-138			
Surrogate: Dibromofluoromethane	23.2		*	25.0		92.8	71-136			
Surrogate: Toluene-d8	23.2		~	25.0		92.8	88-139			
Matrix Spike (AG52006-MS1)	Source: A507227-01 P			Prepared	07/18/05	Analyzed	: 07/19/05			
Benzene	9.93	0.30	นย/ไ	10.0	ND	99.3	39-142		-	
Toluene	8.92	0.30	"	10.0	ND	89.2	44-148			
Ethylbenzene	8.47	0.50	u	10.0	ND	84.7	42-148			
Xylenes (total)	25.3	0.50		30.0	ND	84.3	43-145			
Methyl tert-butyl ether	12.1	0.50	и	10.0	0.55	116	29-161			
Di-isopropyl other	11.6	0.50	н	10.1	ND	112	42-156			
Ethyl tert-butyl ether	11.6	0.50	14	10.2	ND	114	42-151			
Tert-amyl methyl ether	11.6	0.50	**	10.3	ND	113	38-148			
Tert-butyl alcohol	214	10	**	196	ND	109	42-171			
1,2-Dichloroethane	11.9	0.50		10.0	ND	119	36-136			
Chlorobenzene	10.2	0.50	o	10.0	0.60	96.0	41-140			
1,3-Dichlorobenzene	8.73	0.50	0	10.0	ND	87.3	42-139			
1,4-Dichlorobenzene	9.05	0.50		10.0	ND	90.5	41-142			
1,2-Dichlorobenzene	10.4	0.50	"	10.0	ND	99.1	39-145			
1,2-Dibromaethane (EDB)	11.8	0.50		10.0	ND	118	40-147			
Surrogate: Bromofluorobenzene	25.4		- "	25.0		102	78-138			
Surrogate: Dibromofluoromethane	23.3		n	25.0		93.2	71-136			
Surrogate: Toluene-d8	23.4		и	25.0		93.6	88-139			

Batch AG52112 - EPA 5030 Water GCMS



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# CHEMICAL EXAMINATION REPORT

Page 11 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Order Number A507277

Receipt Date/Time

07/12/2005 16:15

Client Code

**SCFACOP** 

Project ID: SCFO - County Gas Site

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769

Client PO/Reference

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52112 - EPA 5030 Water	r GCMS									
Blank (AG52112-BLK1)				Prepared	& Analyze	d: 07/20/0	)5			
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	11							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50								
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	17							
Tert-amyl methyl ether	ND	0.50	**							
Tert-butyl alcohol	ND	10	**							
1,2-Dichloroethane	ND	0.50	11							
Chlorobenzene	ИD	0.50	II .							
1,3-Dichlerobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	II.							
1,2-Dibromoethane (EDB)	ND	0.50								
Surrogate: Bromofluorobenzene	26.5		76	25.0		106	78-138			
Surrogate: Dibromofluoromethane	23.4		11	25.0		93.6	71-136			
Surrogate: Toluene-d8	24.7		11	25.0		98.8	88-139			
LCS (AG52112-BS1)				Prepared	& Analyza	ed: <b>07/2</b> 0/0	05			
Benzeme	10.8	0.30	ug/l	10.0	· · · · · ·	108	68-129			
Toluene	10.4	0.30	"	10.0		104	76-137			
Ethylbenzenc	10.7	0.50	"	10.0		107	78-136			
Xylenes (total)	31.8	0.50	ч	30.0		106	76-134			
Methyl tert-butyl ether	10.3	0.50	"	10.0		103	64-141			
Di-isopropyl ether	10.6	0.50	"	10.1		105	80-132			
Ethyl tert-butyl ether	10.2	0.50	*1	10.2		100	66-138			



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### CHEMICAL EXAMINATION REPORT

Page 12 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Receipt Date/Time

Client Code

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Report Date: 07/22/05 10:43

Order Number

A507277

07/12/2005 16:15

**SCFACOP** 

Client PO/Reference

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag				
Batch AG52112 - EPA 5030 Wate	r GCMS								<u>-</u>					
LCS (AG52112-BS1)		Prepared & Analyzed: 07/20/05												
Tert-amyl methyl ether	10.2	0.50	.,	10.3		99.0	58-142							
Tert-butyl alcohol	175	10	n	196		89.3	70-139							
1,2-Dichloroethane	11.0	0.50	÷r	10.0		110	65-125							
Chlorobenzene	10.6	0.50	"	10.0		106	75-127							
1,3-Dichlorobenzene	10.8	0.50		10.0		108	78-129							
),4-Dichlorobenzene	10.9	0.50	II .	10.0		109	82-124							
1,2-Dichlorobenzene	10.8	0.50	"	10.0		108	81-125							
1,2-Dibromoethane (EDB)	10.9	0.50	11	10.0		109	80-130							
Surrogate: Bromofluorobenzene	25.2		*	25.0		101	78-138			•				
Surrogate: Dibromofluoromethane	22.8		*	25.0		91.2	71-136							
Surrogate: Tolucne-d8	22.9		н	25.0		91.6	88-139							
LCS Dup (AG52112-BSD1)				Prepared	& Analyzo	ed: 07/20/	05							
Benzene	10.8	0.30	ug/l	10.0		108	68-129	0.00	25					
Toluene	10.4	0.30	17	10.0		104	76-137	0.00	25					
Ethylbenzene	10.8	0.50	н	10.0		108	78-136	0.930	25					
Xylenes (total)	31.5	0.50	ii	30.0		105	76-134	0.948	25					
Methyl tert-butyl ether	10.1	0.50	"	10.0		101	64-14]	1.96	25					
Di-isopropyl ether	10.6	0.50	II .	10.1		105	80-132	0.00	25					
Ethyl tert-butyl ether	10.2	0.50	18	10.2		100	66-138	0.00	25					
Tert-amyl methyl ether	10.2	0.50	17	10.3		99.0	58-142	0.00	25					
Tert-butyl alcohol	186	10	**	196		94.9	70-139	6.09	25					
1,2-Dichloroethane	11.0	0.50	11	10.0		110	65-125	0,00	25					
Chlorobenzene	10.8	0.50		10.0		108	75-127	1.87	25					
1,3-Diehlorobenzene	10.8	0.50	ш	10.0		108	78-129	0.00	25					
l,4-Dichlorobenzene	11.0	0.50		10.0		110	82-124	0.913	25					
1,2-Dichlorobenzene	10.6	0.50		10.0		106	81-125	1.87	25					



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# CHEMICAL EXAMINATION REPORT

Page 13 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

A507277

07/12/2005 16:15

SCFACOP

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AG52112 - EPA 5030 Water	r GCMS							-	· · ·	
LCS Dup (AG52112-BSD1)				Prepared	& Analyzo	d: 07/20/	05			
1,2-Dibromoethane (EDB)	10.7	0.50	ű.	10.0		107	80-130	1.85	25	
Surrogate: Bromofluorobenzene	25.1			25.0		100	78-138			
Surrogate: Dibromosluoromethane	22.1		"	25.0		88.4	71-136			
Surrogate: Toluene-d8	22.4		p	25.0		89.6	88-139			
Matrix Spike (AG52112-MS1)	Sou	rce: A5072	297-03	Prepared	& Analyza	ed: 07/20/	0.5			
Benzene	10.5	0.30	ug/l	10.0	ND	105	39-142			
Toluene	10.1	0.30	10	10.0	ND	101	44-148			
Ethylbenzene	10.5	0.50	"	10.0	ND	105	42-148			
Xylenes (total)	30.5	0.50	"	30.0	ND	102	43-145			
Methyl tert-butyl ether	29.0	0.50		10.0	18	110	29-161			
Di-isopropyl ether	9.83	0.50		10.1	ND	97.3	42-156			
Ethyl tert-butyl ether	9.58	0.50		10.2	ND	93.9	42-151			
Tert-amyl methyl ether	9.48	0.50	"	10.3	ND	92.0	38-148			
Tert-butyl alcohol	180	10	"	196	ND	91.8	42-171			
1,2-Diehloroethane	10.6	0.50	**	10.0	ND	106	36-136			
Chlorobenzene	10.2	0.50	19	10.0	ND	102	41-140			
1,3-Diehlorobenzene	10.3	0.50	11	10.0	ND	103	42-139			
1,4-Dichlorobenzene	10.2	0.50		10.0	ND	102	41-142			
1,2-Dichlorobenzene	9.96	0.50		10.0	ND	99.6	39-145			
1,2-Dribronnoethame (EDB)	10.3	0.50	"	10.0	ND	103	40-147			
Surrogate: Bromofluorobenzene	25.5		ш.	25.0		102	78-138			1000
Surrogate: Dibromofluoromethane	22.6		"	25.0		90.4	71-136			
Surrogate: Toluene-d8	22.8		11	25.0		91.2	88-139			



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#### CHEMICAL EXAMINATION REPORT

Page 14 of 14

Sonoma County Facility Operations

2680 Ventura Ave Santa Rosa, CA 95403

Attn: Frank Donahue

Report Date: 07/22/05 10:43

Project No: 00-750-4 / 080-6-1769 Project ID: SCFO - County Gas Site

Order Number

Receipt Date/Time

Client Code

Client PO/Reference

Λ507277

07/12/2005 16:15

SCFACOP

#### Notes and Definitions

D-07 Analysis of this sample indicates the presence of hydrocarbons lower in molecular weight than diesel.

DET Analyte DETECTED

Analyte NOT DETECTED at or above the reporting limit ND

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

PQL Practical Quantitation Limit



# **Work Order Chain of Custody Record**

208 Mason Street, Ukiah, California 95482 e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Company Name:		Project Na	Project Name: Project Number:						Signature below authorizes work under terms stated on reverse side.														
EBA ENGINEERING		50	FO -	gus		00.	750	-4		Analysis Request											TAT		
Mailing Address:		Project Ac	idress:							<u>L</u>													
825 SONOMA AVE, , S.G	2,	260	4 V	ENTUR	. 4	AVE	,															24 hr	
Project Contact (Hardcopy or PDF to):		P.O. #			(	Quote #	‡															48 hr	
DAVID NOREN													~									Lab	Only
Phone/Fax:		Bill to:											OXX	1 8						į		Appraval Fleduired	Use
544-0784		FRANK DONAHO									1	1 1								1 wk	Lab		
Samplers Signature:	Samp	ling	$\overline{}$	tainer	Pre	serva	tive	Ma	trix	1/20	1-00	BTEX	FUEL									0	For L
Sample			VOA	ا پو		E 4				12	19	18	5	EAD								2 wk (stąndard)	
Designation	Date	Time	40ml Poly	Amber Sleeve	걸	HN03 H2S04	None	Water	Soil		,			7								(standard)	
BE-4	7-12-05		6		4		2			×	×	X	×	X								1	
MW-6	1	1208	6		4		2	X		1	1	1	1	}								2	
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